Development and Testing of the Danger Assessment for Law Enforcement (DA-LE)

Jill Theresa Messing, Jacquelyn Campbell, Kelly Dunne, and Suzanne Dubus

———

One-third of women are victimized by intimate partner violence (IPV) in their lifetime; when women are killed, they are often murdered by a previously abusive intimate partner. Risk-informed collaborative interventions, such as domestic violence high risk teams (DVHRTs), use IPV risk assessment to identify and intervene in high-risk IPV cases. This study reports on the development and testing of the Danger Assessment for Law Enforcement (DA-LE), an IPV risk assessment intended for use with DVHRTs. Data were collected through structured telephone interviews from service-seeking survivors of IPV at two time points approximately seven to eight months apart. One sample (*n* = 570) was used to develop the DA-LE and another (*n* = 389) was used to test the predictive validity of the instrument using the receiver operating characteristic area under the curve (AUC). The DA-LE predicted near fatal IPV on follow-up with similar or better accuracy than most validated IPV risk assessment instruments (AUC = 0.6864–0.7516). There were no significant differences in predictive validity based on survivor/offender race or ethnicity. The DA-LE has the potential to identify high-risk police-involved IPV cases. Risk-informed collaborative interventions may enhance outcomes for survivors of IPV by holding offenders accountable, increasing help seeking, and reducing future assaults.

KEY WORDS: *domestic violence high risk teams; intimate partner violence; risk assessment; risk-informed collaborative interventions*

In the United States, 36.4 percent of women are victims of intimate partner violence (IPV) in their lifetime and 21.4 percent of women are severely physically abused by an intimate partner (Smith et al., 2018). Such victimization leads to myriad physical and mental health consequences and, in extreme cases, IPV leads to homicide (Campbell, 2002; Tadegge, 2008). Although the majority of abused women are not killed by their intimate partner, a significant proportion (30 percent–50 percent) of femicide victims are killed by an intimate partner (Campbell, Glass, Sharps, Laughon, & Bloom, 2007; Catalano, 2013). Women of color are at high risk for intimate partner homicide (Bent-Goodley, 2013; Frye et al., 2008; Petrosky et al., 2017). Intimate partner homicide exacts the greatest toll on the lives of women; it also poses a danger to children, friends or allies, and new partners who may be killed in these incidents (R. P. Dobash & Dobash, 2012).

Without intervention, serious IPV may follow a trajectory of increased severity and frequency over time, culminating in homicide (Adams, 2007; Johnson, 2006). Furthermore, specific acts of severe violence, such as strangulation, sexual assault, or use of a weapon, may indicate risk for future homicide (R. E. Dobash, Dobash, Cavanagh, & Medina-Ariza, 2007; Harden, Du, Spencer, & Stith, 2019; Spencer, & Stith, 2018; Thomas, Dichter, & Matejkowski, 2011). Men who kill their intimate partners are likely (56.9 percent) to have been violent in a previous intimate relationship (R. E. Dobash, Dobash, Cavanagh, & Lewis, 2004) and tend to (65 percent–80 percent) abuse their partner before killing her (Campbell et al., 2007). These men's relationships with women are typified by violence, control, jealousy, and possessiveness; furthermore, the patterns of denial and blame that are often present in IPV cases are evident in men's descriptions of intimate partner homicide (R. E. Dobash & Dobash, 2011; R. E. Dobash et al., 2004).

Law enforcement officers are often called on to intervene in IPV incidents, particularly when violence is severe or frequent (Hanson et al., 2019). In one study, police had been in contact with the victim of intimate partner femicide for a domestic violence complaint in 91 percent of cases, visiting the victim an average of 6.2 times over the

three years before the murder (Koppa & Messing, 2019). Research also estimates that 20 percent–25 percent of IPV perpetrators account for the majority of severe and repeat IPV (Bennett & Williams, 2001; Maxwell, Garner, & Fagan, 2002). This body of evidence indicates that a small number of perpetrators have multiple victims, are likely to cause the most harm, and are often in contact with law enforcement; as such, the use of risk assessment to identify and intervene in high-risk cases could affect rates of repeat IPV, severe IPV, and femicide.

IPV RISK ASSESSMENT

The 2013 reauthorization of the Violence Against Women Act (VAWA) (P.L. 113-4) prioritizes funding for police departments that use evidence-based lethality assessments, and their use is increasingly mandated (Klein, 2012). The National Association of Social Workers (NASW) also suggests assessing risk to determine the most appropriate interventions (NASW, in press). Most available IPV risk assessments predict future violence better than chance, and the majority have demonstrated higher predictive validity than survivor prediction (Messing & Thaller, 2013). Multiple IPV risk assessments have been developed with various foci across a range of dimensions. For example, IPV risk assessments have been developed for use by social workers, police officers, health care professionals, probation officers, or clinicians; these professionals use the risk assessments in different settings, for various purposes, and using dissimilar information-gathering strategies (Graham, Sahay, Rizo, Messing, & Macy, 2019; Messing & Thaller, 2015). IPV risk assessments are also intended to predict different outcomes: rearrest, reassault, severe reassault, or homicide (Graham et al., 2019). IPV risk assessment has been suggested for use in evidence-based screening and assessment across various social work practice settings and for safety planning with survivors of IPV (Messing, 2019).

The Danger Assessment (http://www.dangerassessment.org) is the only IPV risk assessment specifically developed to predict intimate partner homicide. Development of the tool included comparisons of the risk factors present in intimate partner femicide cases with those present in the relationships of women who were abused but not killed by their partners (Campbell et al., 2003). Multiple studies indicate that the Danger Assessment predicts femicide, attempted femicide, and repeat or severe assault with similar or better accuracy than most other validated IPV risk assessment instruments (Campbell, Webster, & Glass, 2009; Messing & Thaller, 2013). The Danger Assessment was developed to be used by a survivor in collaboration with a social worker, advocate, or health care provider and includes a calendar activity as well as 20 items, 19 of which are predictive of intimate partner homicide (Campbell et al., 2003).

RISK-INFORMED COLLABORATIVE INTERVENTIONS

IPV cases are a unique type of response for police officers because the parties are intimately involved and may share financial and familial entanglements. There is also potential for escalation including lethality. These dynamics enhance the need for comprehensive services, including the need for social workers to provide services to IPV survivors who have engaged with the justice system. In 2005, the Jeanne Geiger Crisis Center (JGCC), an IPV service provider, developed domestic violence high risk teams (DVHRTs) to bring together social workers, domestic violence advocates, police officers, prosecutors, parole and probation officers, batterers' intervention providers, and hospital staff to respond to the most dangerous IPV cases (Snyder, 2013). The goal of DVHRTs is to increase victim safety by educating survivors about their risk, connecting high-risk survivors with social services, and focusing on criminal and civil justice interventions for perpetrators. Police officers screen most cases into DVHRTs and were previously using a variety of jurisdiction-specific checklists to identify high-risk cases.

There are 56 DVHRTs in operation in the United States and 25 additional teams in development. As the DVHRT model was adopted across more communities, it became apparent that law enforcement agencies would need a consistent, validated, evidence-based risk assessment tool to identify high-risk cases for referral to the DVHRT. JGCC identified several requirements for the tool. First, because DVHRTs are intended to prevent homicide, the risk assessment must focus on the prediction of homicide or near-fatal violence. Second, the risk assessment would be administered by police officers at the scene of IPV incidents and, therefore, should be easy to score and quick to administer with a built-in cut point to identify high-risk cases. Due to these initial

requirements, items were derived from the Danger Assessment. Because the original purpose of the Danger Assessment was to facilitate risk-informed safety planning with the survivor, the full Danger Assessment is too lengthy to administer at the scene of a crime. A third requirement was that the predictive validity should be similar to other IPV risk assessment tools, and the tool should screen in a manageable percentage of cases for a DVHRT to monitor. Fourth, the risk assessment should focus on criminal behaviors as these could be incorporated into police officers' current practice in a straightforward manner and would have more importance in court-based decision making. Finally, the included risk items should have implications for risk management or safety planning. This article documents the development of the Danger Assessment for Law Enforcement (DA-LE). Although this IPV risk assessment was developed for use by DVHRTs, it could be used across multiple social work settings to quickly screen IPV cases for high risk.

DATA AND METHOD

This research used secondary data analysis of two data sets, collected using similar methods and measures during different time frames and from different locations. One data set was used to create the DA-LE, and the other was used to test the predictive validity. Incorporating an independent validation sample provides evidence of reliability and information about the predictive validity of the instrument with different groups of people (Graham et al., 2019). This analysis of data was approved by the institutional review board of Arizona State University.

Construction Sample

The Oklahoma Lethality Assessment Study (OK-LA) was a quasi-experimental field trial funded by the National Institute of Justice (NIJ) (grant number 2008-WG-BX-0002) to examine the effectiveness of the Lethality Assessment Program (LAP), a risk-informed collaborative intervention developed by the Maryland Network Against Domestic Violence (Messing, Campbell, et al., 2015). This quasi-experimental research design used a historical comparison group; police officers treated IPV calls as usual for the first 22 months of the study and implemented the LAP for the subsequent 27 months of the study. Throughout both the comparison and the intervention phases of the research, across seven police jurisdictions in Oklahoma, police officers read a referral statement to IPV victims asking if a researcher could contact them. For those who responded affirmatively, the officer collected one to two phone numbers and a safe time to call the survivor. These referrals were sent to the research team, who subsequently contacted survivors to request their participation in two telephone interviews approximately six months apart. Danger Assessment questions were incorporated into the interview for both the comparison and the intervention group (for additional information about the study methods and results, see Messing, Campbell, et al., 2015).

From January 2009 to February 2013, officers referred 3,159 women to researchers. Of nonduplicate, eligible (over 18 years, victim of IPV) referrals ($n = 3,060$), 49.9 percent ($n = 1,526$) were able to be contacted. Structured telephone interviews in English were conducted with 1,081 survivors at time 1 (35.3 percent of nonduplicate, eligible referrals), and 619 (57.3 percent) were retained for a structured telephone interview approximately seven months later. Interviews lasted approximately 45 minutes on average, and interviewers adhered to strict safety protocols. Although it is not possible to ascertain whether the final sample differs from those referred (or from those not referred), there are likely some characteristics that make a survivor more or less inclined to participate in a research study. Survivors who participated in the follow-up interview were significantly older [$t(1,064) = -3.32, p < .05$], more likely to have attended college or vocational school [$\chi^2(2, N = 1,081) = 20.14, p < .05$], and more likely to be employed [$\chi^2(2, N = 1,081) = 7.58, p < .05$] than participants who did not participate in follow-up. Listwise deletion of cases with missing data on any one key variable resulted in a final sample for analysis of 570; there were no significant sociodemographic differences between survivors with missing data and those without.

Independent Validation Sample

The Risk Assessment Validation Study (RAVE) was funded by NIJ (grant number 2000-WT-VX-0011) to examine the ability of four IPV risk assessment instruments to predict future violence (Roehl, O'Sullivan, Webster, & Campbell, 2005). Women who had experienced IPV in the

previous six months were recruited from one East Coast city and one West Coast county after seeking or receiving criminal justice (that is, 911 calls), civil court (that is, petitioning for civil protection orders), medical (that is, emergency department), or social services (that is, residential or community-based services) interventions. Participant recruitment varied across sites. In civil court settings, recruitment occurred while survivors were waiting for their cases to be called or for their paperwork to be completed. Women in social services settings were provided a toll-free number to call if they wanted to participate. Those recruited through 911 calls were contacted by researchers based on information contained in police reports. Once a researcher was in contact with a survivor, she was recruited into the study (for additional information about study methods and results, see Roehl et al., 2005).

Data were collected through structured in-person or telephone interviews in English or Spanish over 17 months (February 2002–June 2003) from 1,307 victims of IPV. Each participant was randomly assigned to respond to two IPV risk assessment instruments; 666 participants responded to Danger Assessment questions at time 1, and 400 (60.1 percent) of these participants were retained for a follow-up interview approximately eight months later. Interviews lasted approximately 35 minutes to one hour, and interviewers adhered to strict safety protocols. Survivors who participated in the follow-up interview were significantly older [$t(664) = -2.50, p < .05$]; more likely to be Latina; and less likely to be other, multiracial, or American Indian/Alaska Native [$\chi^2(3, N = 666) = 10.02, p < .05$]. Listwise deletion of cases with missing data on any one key variable resulted in a final sample for analysis of 389; on sociodemographic factors, there were no significant differences between survivors with and survivors without missing data on key variables.

Measures

Demographic and Relationship Variables. At the baseline interview, participants in both samples were asked to report their educational achievement, employment status, racial and ethnic background, and age (in years). In the OK-LA study, participants were also asked about their partner's racial and ethnic background. Participants were able to self-report as many racial and ethnic

identities as appropriate, and responses were collapsed into five mutually exclusive categories: white, African American, Latina/o, Native American, and multiracial/other. Participants were asked to report their legal marital status as single, married, or separated/divorced.

Risk Items. Danger Assessment items were prefaced with a request for the participant to consider "your partner and your relationship" when responding to the questions. In the RAVE study "your partner" was replaced with "he," "him," or "his" and in the OK-LA study, "your partner" was replaced with the participant's partner's name. The following questions were asked: "Has the physical violence increased in frequency or severity over the past six months?" "Has [your partner] ever used a weapon or threated you with a weapon?" "Does [your partner] try to choke you?" "Does [your partner] own a gun?" "Has [your partner] ever forced you into sex when you didn't wish to?" "Does [your partner] use drugs (by drugs, I mean 'uppers' or amphetamines, speed, angel dust, cocaine, crack, street drugs, heroin, or mixtures)?" "Does [your partner] threaten to kill you?" "Do you believe [your partner] is capable of killing you?" "Does [your partner] consume a large amount of alcohol or get drunk every day or almost every day?" "Does [your partner] control most or all of your daily activities? (For instance, does [your partner] tell you who you can be friends with, how much money you can have, or when you can take the car?)" "Have you ever been beaten by [your partner] when you were pregnant?" "Is [your partner] violently and constantly jealous of you? (For instance, does [your partner] say, 'If I can't have you, no one can.')" "Has [your partner] ever threatened or tried to commit suicide?" "Does [your partner] threaten to harm your children or people that you care about?" "Do you have a child that is not [your partner's]?" Is [your partner] unemployed?" "Have you left [your partner] in the past year?" "Does [your partner] follow or spy on you, leave threatening notes, destroy your property, and/or call you when you don't want him to?" and "Has [your partner] avoided arrest for domestic violence?" In both studies, Danger Assessment questions were asked at baseline to measure risk of homicide and had response options of yes or no.

In addition, two questions that are not included on the Danger Assessment were examined for inclusion on the DA-LE. A perpetrator's previous

attempts to kill his partner was assessed with two questions at baseline: (1) "Has [your partner] ever done anything that might have killed you or nearly killed you whether or not he intended to?" and (2) "Has [your partner] ever tried to kill you?" Response options were yes and no; a yes to either or both items was considered affirmative for past attempts to kill. Multiple strangulation was assessed with an item on the revised Conflict Tactics Scale (Straus, Hamby, Boney-McCoy, & Sugarman, 1996): "How often in the past six months has [your partner] choked you?" Response options included never, once, twice, three to five times, and six or more times. Participants who responded that their partner strangled them two or more times in the past six months were recorded as having been strangled multiple times.

Dependent Variable. Victim-reported near-fatal violence at approximately seven to eight months follow-up was assessed by combining the same two dichotomous questions included earlier: (1) "Since I talked to you last, has [your partner] done anything that might have killed you or nearly killed you whether or not he intended to?" and (2) "Since the incident that I interviewed you about last time, has [your partner] tried to kill you?" An affirmative response to either or both questions was an indicator for near-lethal violence.

Data Analysis

All analyses were conducted using Stata/SE 14 (StataCorp, 2015). The data analysis was intended to develop and test an abbreviated version of the Danger Assessment for use with DVHRTs. OK-LA data were used to calculate relative risk ratios (RRRs) examining the bivariate relationship between all potential risk items and the outcome of victim-reported near-fatal violence. Relative risk was used because the interpretation is more intuitive, providing the probability of an outcome (that is, near-fatal violence at follow-up) in the group exposed to a particular risk factor as compared with the group not exposed to a particular risk factor (Simon, 2001). Relative risk also provides an estimate of the strength of each association, with an RRR of 1 indicating that there is no association, an RRR of less than 1 indicating that the association is negative or that the risk of near-fatal violence is decreased when a particular risk factor is present, and an RRR of more than 1 indicating that the association is positive or that the risk of near-fatal violence is increased when a particular risk factor is present. Thus, a relative risk of 2 would indicate that a participant has two times as much probability of experiencing near-fatal violence at follow-up given the presence of a particular risk factor (Simon, 2001).

The correct prediction of future events—predictive validity—is the most important measure of accuracy for a risk assessment instrument. Predictive validity is a function of sensitivity (the correct classification of cases) and specificity (correct classification of non-cases), such that higher sensitivity and specificity lead to greater predictive validity (Douglas, Guy, Reeves, & Weir, 2005). However, in practice it may be important to consider either sensitivity or specificity as more important, depending on the function of the tool (Messing & Campbell, 2016). In practice, the DA-LE will be used to screen IPV survivors and perpetrators into a resource-intensive intervention intended to enhance safety of the victim and accountability of the offender through criminal justice sanctions. Because screening a case into the DVHRT expends resources and limits the perpetrator's liberty, it is particularly important to balance specificity (that is, not screening offenders into enhanced sanctions when they do not attempt to kill their partner on follow-up) and sensitivity (that is, screening offenders into enhanced sanctions and survivors into services when the offender attempts to kill their partner on follow-up). Positive predictive value (PPV) (that is, the probability of future near-fatal violence among those identified as high risk) and negative predictive value (NPV) (that is, the probability of no future near-fatal violence among those identified as not high risk) are additional measures of predictive validity.

The receiver operating characteristic (ROC) was used to examine the predictive validity of the developed risk assessment. The ROC curve is a graph that plots sensitivity versus one minus specificity, thereby taking into account both the sensitivity and the specificity of an instrument (Rice & Harris, 1995). The area of the graph that lies under the ROC curve—that is, the area under the curve (AUC)—quantifies the predictive accuracy of a risk assessment instrument on a scale of 0–1.0. An AUC of 0.50 indicates that the instrument predicts cases no better than chance, and 1.0 indicates that every case was predicted with perfect accuracy (Douglas et al., 2005). The AUC can

be interpreted as the probability that a randomly selected case would have a higher score on the risk assessment instrument than a randomly selected non-case; thus, an AUC of 0.65 would indicate that there is a 65 percent chance that a randomly selected case would have a higher score on the risk assessment instrument than a randomly selected non-case (Douglas et al., 2005; Rice & Harris, 1995). Using a ROC curve has several advantages important to this analysis. The ROC has demonstrated stability as the base rate (the number of cases in a sample) changes (Rice & Harris, 1995). This is important as the proportion of participants reporting near fatal violence at follow-up is relatively low and different across the samples (OK–LA = 8.95 percent, RAVE = 12.34 percent). Furthermore, the ROC allows statistical comparisons of predictive validity across risk assessments and subgroups; the predictive validity of the DA–LE is compared with the predictive validity of the Danger Assessment; and comparisons are made across race and ethnicity.

RESULTS

As shown in Table 1, participants in both data sets were of similar ages and had similar employment status. Beyond this, the construction and independent testing samples were quite different. Women in the RAVE sample were significantly more likely to have children living at home with them and were significantly more likely to be married to their abusive intimate partner. There were significant differences across the racial and ethnic makeup of the participants (survivors); the RAVE sample consisted primarily of Latinas (55.27 percent) and the OK–LA sample was primarily white (43.11 percent), with a notable number of Native American participants (9.48 percent). Finally, women in the RAVE study were significantly more likely to have less than a high school education; women in the OK–LA study were significantly more likely to have attended some college or vocational school. These differences allow examination of the predictive ability of the DA–LE across women with dissimilar demographic and relationship profiles.

Development of the DA–LE

The DA–LE was created as a collaboration between researchers and JGCC using an iterative process. First, researchers examined the bivariate association between each risk factor and the outcome

of near fatal violence in the OK–LA database and reported this information to practitioner partners (see Table 2). Practitioner partners then incorporated their substantive knowledge and clinical expertise to assist in determining which risk factors to retain on the DA–LE. For the DA–LE to be feasible for police departments to implement, JGCC recommended including approximately 10 risk items that would be easy for police officers to ask, focus on criminal behavior, and inform ongoing risk management. JGCC also requested that the scoring of the risk assessment be simple, with one point assigned to each risk factor present, and these points added to score the DA–LE. Researchers examined various combinations of risk factors within these parameters and used this scoring system to determine the combination of items that provided the highest overall predictive accuracy in the creation sample.

Risk factors first considered for inclusion had significant associations with the outcome of near-fatal violence. Several risk factors meeting this criterion were excluded. First, avoiding arrest was discarded because the DA–LE is intended to be asked by police officers at the scene of an IPV incident. As such, a question about the perpetrator avoiding arrest would likely result in confusion on administration. Excessive alcohol use by the perpetrator was similarly excluded based on JGCC clinical expertise. Excessive alcohol use is not a criminal behavior, and JGCC's practice knowledge indicates that police officers would not be likely to ask this question.

Researchers then examined combinations of risk factors and removed risk factors when their predictive ability was subsumed by other risk factors. When included in a model together, extreme controlling behavior remains significant while extreme jealousy becomes nonsignificant; thus, extreme controlling behavior was included in the DA–LE but jealousy was not. Finally, there was an association in these data between attempted homicide at follow-up and threats to harm children. However, the risk factors of multiple strangulation, threats to kill the survivor, and the survivor's belief that her partner is capable of killing her are significantly associated with threats to harm children. When examined in the scoring structure, it was decided that threats to harm children provided the least predictive value, so this risk factor was excluded.

Table 1: Sample Descriptions and Comparisons between Groups			
Demographic and Relationship Characteristics	OK-LA n (%)	RAVE n (%)	Group Differences
Mean age (SD)	33.02 (10.19)	31.90 (8.63)	$t(914) = 1.83$
Education			
Less than high school	100 (17.70)	129 (33.16)	$\chi^2(2, N = 954) = 48.56$*
High school graduate/GED	147 (26.02)	125 (32.13)	
Some college/vocational school or more	318 (56.28)	135 (34.70)	
Employment			
Not full-time/part-time/seasonal	314 (55.09)	205 (52.70)	$\chi^2(2, N = 959) = 1.50$
Full-time	185 (32.46)	125 (32.13)	
Part-time/seasonal	71 (12.46)	59 (15.17)	
Race/ethnicity			
Hispanic/Latino	41 (7.33)	215 (55.27)	$\chi^2(4, N = 948) = 318.37$*
White	241 (43.11)	38 (9.77)	
African American/black	170 (30.41)	107 (27.51)	
American Indian/Alaskan Native	53 (9.48)	1 (0.26)	
Other/multiracial	54 (9.66)	28 (7.19)	
Marital status			
Single	334 (58.91)	187 (48.32)	$\chi^2(2, N = 954) = 22.99$*
Married	147 (25.93)	157 (40.57)	
Divorced/separated	86 (15.17)	43 (11.11)	
Children in the home			
Yes	371 (65.09)	338 (86.89)	$\chi^2(1, N = 959) = 57.02$*
No	199 (34.91)	51 (13.11)	

Notes: OK-LA = Oklahoma Lethality Assessment Study; RAVE = Risk Assessment Validation Study.
*$p < .05$.

Following this, risk factors that were not significantly associated with the outcome of near fatal violence were considered for inclusion. Separation was included because of the well-established relationship between estrangement and homicide (Campbell et al., 2007; Campbell et al., 2003; Johnson, 2006; Wilson & Daly, 1993) and the potential for informing risk management. Partner ownership of a gun and partner suicide threats were included in the DA-LE given their strong relationships, respectively, to homicide and homicide–suicide in previous research (Campbell et al., 2003; Koziol-McLain et al., 2006). Nonfatal strangulation was included because it is associated with intimate partner homicide and because it is a criminal behavior, a form of coercive control, and a serious health risk (Glass et al., 2008; Messing, Patch, Wilson, Kelen, & Campbell, 2018; Spencer & Stith, 2018; Thomas, Joshi, & Sorenson, 2014). Given that multiple strangulation is strongly associated with the out-

come, both strangulation and multiple strangulation were included.

The final DA-LE comprises the following 11 questions: (1) "Has the physical violence increased in severity or frequency over the past year?" (2) "Have you left him/her after living together in the past year?" (3) "Does he/she control most or all of your daily activities?" (4) "Has he/she tried to kill you?" (5) "Has he/she ever threatened to kill you?" (6) "Has he/she used a weapon against you or threatened you with a lethal weapon?" (7) "Has he/she ever tried to choke (strangle) you?" (8) "Has he/she choked (strangled) you multiple times?" (9) "Do you believe he/she is capable of killing you?" (10) "Does he/she own a gun?" and (11) "Has he/she ever threatened or tried to commit suicide?" The questions are asked of the victim at the scene of a police-involved IPV incident. Each "yes" response is assigned one point, and the risk factors are added to create an overall score between 0 and 11.

Risk Factor	Yes % (n)	RRR [95% CI]
Table 2: Risk Factors Considered for Inclusion: Frequency and Relative Risk in the OK-LA Data Set (_n_ = 570)		
Risk factors included on the DA-LE		
Has the physical violence increased in severity or frequency over the past year?	56.84 (324)	2.14* [1.13, 4.05]
Have you left him/her after living together in the past year?	72.46 (413)	1.62 [0.79, 3.32]
Does he/she control most or all of your daily activities?	38.95 (222)	2.66* [1.48, 4.80]
Has he/she tried to kill you?	24.74 (141)	3.05* [1.70, 5.49]
Has he/she ever threatened to kill you?	50.18 (286)	2.12* [1.15, 3.89]
Has he/she used a weapon against you or threatened you with a lethal weapon?	31.40 (179)	2.28* [1.28, 4.07]
Has he/she ever tried to choke (strangle) you?	59.12 (337)	1.74 [0.93, 3.25]
Has he/she choked (strangled) you multiple times?	37.02 (211)	4.26* [2.96, 7.92]
Do you believe he/she is capable of killing you?	57.02 (325)	2.65* [1.36, 5.17]
Does he/she own a gun?	18.95 (108)	0.91 [0.42, 1.93]
Has he/she ever threatened or tried to commit suicide?	33.51 (191)	0.90 [0.48, 1.67]
Risk factors not included on the DA-LE		
Is he unemployed?	50.53 (288)	1.11 [0.63, 1.98]
Has he avoided being arrested for domestic violence?	37.19 (212)	2.65* [1.47, 4.75]
Do you have a child that is not his?	52.28 (298)	1.76 [0.96, 3.20]
Has he ever forced you to have sex when you did not wish to do so?	26.14 (149)	1.47 [0.79, 2.71]
Does he use illegal drugs?	32.81 (187)	1.63 [0.91, 2.92]
Is he an alcoholic or problem drinker?	40.35 (230)	2.49* [1.38, 4.49]
Is he violently and constantly jealous of you?	60.53 (345)	2.26* [1.16, 4.42]
Have you ever been beaten by him while pregnant?	20.88 (119)	1.66 [0.88, 3.15]
Does he threaten to harm your children?	35.09 (200)	2.46* [1.37, 4.39]
Does he follow or spy on you, leave you threatening notes or messages, destroy your property, or call you when you don't want him to?	51.93 (296)	1.24 [0.70, 2.22]

Notes: OK-LA = Oklahoma Lethality Assessment Study; DA-LE = Danger Assessment for Law Enforcement; RRR = relative risk ratio.
*$p < .05$.

Predictive Validity

The ROC AUC for the DA-LE in the construction database is 0.6864 (95 percent confidence interval [CI] = 0.6139, 0.7590), corresponding to a medium effect size (Rice & Harris, 2005). The AUC for the DA-LE in the independent validation sample is 0.7516 [95 percent CI = 0.6785, 0.8246], corresponding to a large effect size (Rice & Harris, 2005). To determine a cut point (that is, the number of risk factors that referred a case for further review by DVHRT), we examined the proportion of cases screened in, sensitivity, specificity, and

	Table 3: Predictive Validity of the Danger Assessment for Law Enforcement (DA-LE)					
	Development Sample: OK-LA Data (n = 570)					
DA-LE Score	**Screened in** **n (%)**	**Correctly** **Classified** **%**	**Sensitivity** **%**	**Specificity** **%**	**PPV** **%**	**NPV** **%**
≥0	570 (100.00)	8.95	100.00	0.00	8.95	0.00
≥1	547 (95.96)	12.63	98.04	4.24	9.14	95.65
≥2	505 (88.60)	20.00	98.04	12.33	9.90	98.46
≥3	445 (78.07)	30.18	96.08	23.70	11.01	98.40
≥4	378 (66.32)	40.18	86.27	35.65	11.64	96.35
≥5	301 (52.81)	51.93	76.47	49.52	12.96	95.54
≥6	238 (41.75)	60.88	64.71	60.50	13.87	94.58
≥7	**173 (30.35)**	**70.18**	**52.94**	**71.87**	**15.61**	**93.95**
≥8	113 (19.82)	78.95	43.14	82.47	19.47	93.65
≥9	64 (11.23)	84.04	23.53	89.98	18.75	92.29
≥10	28 (4.91)	88.25	11.76	95.76	21.43	91.70
=11	10 (1.75)	90.00	3.92	98.46	20.00	91.25
	Independent Validation Sample: RAVE Data (n = 389)					
≥0	389 (100.00)	12.34	100.00	00.00	12.34	0.00
≥1	358 (92.03)	20.31	100.00	9.09	13.41	100.00
≥2	329 (84.58)	27.25	97.92	17.30	14.29	98.33
≥3	280 (71.98)	37.79	89.58	30.50	15.36	95.41
≥4	242 (62.21)	47.04	87.50	41.35	17.36	95.92
≥5	196 (50.39)	56.81	79.17	53.67	19.39	94.82
≥6	157 (40.36)	66.32	77.08	64.81	23.57	95.26
≥7	**108 (27.76)**	**75.84**	**64.58**	**77.42**	**28.70**	**93.95**
≥8	64 (16.45)	80.98	39.58	86.80	26.69	91.08
≥9	33 (8.48)	85.35	25.00	93.84	36.36	89.89
≥10	12 (3.08)	87.15	10.42	97.95	41.67	88.59
=11	3 (0.77)	88.43	6.25	100.00	100.00	88.34

Notes: OK-LA = Oklahoma Lethality Assessment Study; PPV = positive predictive value; NPV = negative predictive value; RAVE = Risk Assessment Validation Study. Rows in boldface indicate chosen cutoff.

percentage of cases correctly classified at any particular score (0–11). Our aim was to screen in a manageable number of cases with balanced sensitivity and specificity. As shown in Table 3, in the OK-LA data set, at the chosen cut point of 7, 30.35 percent of those screened are classified as high risk, 70.18 percent of the sample is correctly classified, sensitivity is 52.94 percent, specificity is 71.87 percent, the PPV is 15.61 percent, and the NPV is 93.95 percent. In the RAVE data, at a score of 7, the percentage correctly classified (75.84 percent), sensitivity (64.58 percent), specificity (77.42 percent), and PPV (28.70 percent) are all higher, whereas the percentage screened in is slightly lower (27.76 percent) and the NPV is the same (93.95 percent).

Cronbach's alpha for the DA-LE is 0.75 (OK-LA) to 0.76 (RAVE), which is consistent with reported measures of internal consistency reliability in previous IPV risk assessment literature

(Graham et al., 2019). As shown in Table 4, there were no significant differences in the predictive validity of the DA-LE by race or ethnicity of the victim (OK-LA and RAVE) or perpetrator (OK-LA data). There were also no significant differences between the predictive validity of the DA-LE and the predictive validity of the Danger Assessment in the construction [$\chi^2(1, N = 570) = 2.30$, nonsignificant] or validation [$\chi^2(1, N = 389) = 2.07$, nonsignificant] samples.

DISCUSSION

This article reported on the development and validation of the DA-LE, a version of the Danger Assessment intended to be administered at the scene of police-involved IPV incidents to screen high-risk offenders into DVHRTs. The ROC AUC, a measure of predictive validity that has been suggested as a standard measure across disciplines, ranged from 0.6864 to 0.7516 indicating

Table 4: Comparisons of the Predictive Validity of the DA-LE by Survivor and Perpetrator Race/Ethnicity		
	n	**ROC AUC [95% CI]**
OK–LA data, survivor race/ethnicity[a]		
African American	170	0.6638 [0.5262, 0.8013]
Latina	41	0.7105 [0.4741, 0.9470]
Native American	53	0.5542 [0.3023, 0.8061]
White	241	0.7267 [0.6017, 0.8517]
Multiracial	40	0.7500 [0.5226, 0.9774]
OK–LA data, perpetrator race/ethnicity[b]		
African American	230	0.6745 [0.5590, 0.7900]
Latino	51	0.6632 [0.3242, 1.00]
White	201	0.6590 [0.5198, 0.7981]
Multiracial	26	0.6420 [0.3871, 0.8970]
RAVE data, survivor race/ethnicity[c]		
African American	107	0.7545 [0.6065, 0.9025]
Latina	215	0.7270 [0.6191, 0.8349]
White	38	0.7708 [0.5302, 1.00]
Other	29	0.8225 [0.6730, 0.9720]

Notes: OK–LA reported *n*s do not include the full sample as some racial or ethnic groups were too small to include in statistical analyses of predictive validity. DA-LE = Danger Assessment for Law Enforcement; OK-LA = Oklahoma Lethality Assessment Study; ROC = receiver operating characteristic; AUC = area under the curve; RAVE = Risk Assessment Validation Study.
[a] $\chi^2(4, N = 545) = 1.88$, not significant (NS).
[b] $\chi^2(3, N = 508) = 0.06$, NS.
[c] $\chi^2(3, N = 389) = 1.04$, NS.

that (depending on the sample) there is a 69 percent to 75 percent chance that a randomly selected case would have a higher score on the DA-LE than a randomly selected non-case (Douglas et al., 2005; Rice & Harris, 1995). The 11-item DA-LE predicted near fatal violence at seven to eight months follow-up as did the 20-item Danger Assessment, and with predictive validity similar to other IPV risk assessments (Messing & Thaller, 2013), indicating potential to identify high-risk cases.

The DA-LE predicted attempted homicide (a rare event) with a medium to high effect size across two independent samples of IPV survivors (Rice & Harris, 2005). The sample used for construction was recruited from the scene of police-involved IPV incidents in the Southwest United States; the validation sample was recruited across criminal justice, civil justice, and social services settings in an East Coast city and a West Coast county. Some demographic and relationship characteristics varied across samples. Thus, while the interviewees were similar in some respects (for example, service-seeking IPV survivors), differences indicate that the DA-LE may be predictive across diverse groups and locations. Although follow-up time frames were similar, women in the RAVE (validation) sample were interviewed an average of one month later than women in the OK-LA (construction) sample.

Differences in recruitment and time to follow-up may account for the higher rate of near fatal violence at follow-up in the RAVE sample (12.34 percent versus 8.95 percent). Furthermore, the DA-LE had a higher AUC in the independent validation sample than in the construction sample; although additional testing is needed, this indicates reliability.

One main difference between the samples was in the self-identified racial and ethnic identities of participants. Both the OK-LA and RAVE data sets had similar proportions of African American respondents (approximately 30 percent of each sample), but the OK-LA data included more white and Native American survivors, whereas the RAVE data consisted of over 50 percent Latina women. There were no significant differences in the ROC AUC across racial and ethnic groups, indicating that the DA-LE predicted follow-up near-fatal violence with similar accuracy when comparisons were made among survivors who identified as Latina, white, African American, and another race or ethnicity (RAVE data); survivors who identified as Native American, Latina, African American, white, or multiracial (OK-LA data); and survivors who identified their partners as African American, Latino, white, or multiracial (OK-LA data). Although there were no significant differences in point estimates of predictive validity across

racial or ethnic groups, where subgroup sample sizes were small in the OK–LA data ($n = 26–53$), the 95 percent CIs of the ROC AUC were large and crossed 0.50 (that is, predicting no better than chance).

Previous research has found that women of color and immigrant women are more vulnerable to IPV and intimate partner homicide (Bent-Goodley, 2013; Frye et al., 2008; Petrosky et al., 2017) and that risk assessment should be tailored to specific cultural groups to enhance cultural competency (Messing, Amanor-Boadu, Cavanaugh, Glass, & Campbell, 2013; Sabri et al., 2018). Furthermore, concerns have been raised about racial bias in risk assessment generally and in IPV risk assessment in particular (Ferraro & Websdale, 2018). Although these analyses indicate that the DA–LE performs similarly across racial and ethnic groups where data were collected, it is important to identify structural biases that affect who is visited by police officers, whom police identify as an IPV victim and choose to screen, and who chooses to engage with police officers around risk assessment and intervention at the scene of a police-involved IPV case (Messing, Becerra, et al., 2015; Messing et al., 2016; Richie, 2012). Future research should collect larger samples of women from marginalized groups to examine the predictive ability of risk assessments and to assist in understanding the impact of risk assessment and risk-informed collaborative interventions on communities of color.

The purpose of DVHRTs is to increase safety for IPV survivors by connecting them with social services and to increase accountability for high-risk offenders, potentially through enhanced pretrial detention and conditions. Outside of the domestic violence arena, detaining an offender during the pretrial period has led to a higher likelihood of guilty pleas, incarceration, new arrests, and post-conviction recidivism (Bechtel, Lowenkamp, & Holsinger, 2011; Kellough & Wortley, 2002; Lowenkamp, VanNostrand, & Holsinger, 2013; Tartaro & Sedelmaier, 2009). Pretrial decisions are often made subjectively by judges or are based on the criminal charge and prior criminality without attending to the specific IPV risk posed by an offender (Milgram, Holsinger, Vannostrand, & Alsdorf, 2015). Although there is nobody of literature examining pretrial decision making for IPV, similar to other crimes, objective pretrial risk assessment may reduce bias in criminal justice decision mak-

ing and enhance safety for survivors (Neal, 2012). Given the often repetitive nature of IPV and the potential for lethality, pretrial detention or appropriate conditions of release may provide a survivor with the respite she needs to engage in services or consider her options. At the same time, it is important to prioritize survivor self-determination and consider the impact of detention on case and familial outcomes.

The cut point chosen to screen a case into the DVHRT intervention balances sensitivity and specificity due to the goal of enhancing offender accountability at high levels of risk (Messing & Campbell, 2016). Information about the sensitivity and specificity of a risk assessment at various cut points can assist decision makers to determine appropriate interventions at a range of risk levels. As risk assessment and risk-informed collaborative interventions become increasingly widespread (Klein, 2012), social workers must be able to incorporate risk assessment into their practice with survivors and perpetrators of violence. It may be appropriate and feasible for social workers on DVHRTs or collaborating with police departments to follow up with survivors who have lower risk scores. For social workers or domestic violence advocates, intervening with a survivor presenting with three to four factors indicating high risk (sensitivity = 86.27 percent to 96.08 percent), even when her partner does not attempt to kill her in the subsequent seven to eight months, presents an opportunity for risk-informed safety planning, a process of working with a survivor to mitigate identified risks in ways consistent with client self-determination (Messing, 2019). Following the DA–LE with the Danger Assessment in a social work practice context presents additional opportunities to identify and diminish risk posed by a violent partner.

Risk assessment with survivors and perpetrators of IPV should be done within an evidence-based practice framework, wherein a risk assessment score presents the best evidence available of the likelihood of future violence or homicide, and practitioner expertise and client self-determination are equally important aspects of the assessment (Messing, 2019). The DA–LE includes an opportunity for the police officer at the scene of the incident to use practitioner expertise to identify an offender as high risk when the DA–LE score is lower than 7. Furthermore, due to resource

constraints, DVHRTs often cannot include all screened-in cases in the intervention. As such, practitioner expertise is used to determine which of the screened-in cases will be the focus of DVHRT efforts. Self-determination for survivors includes the ability to opt out of the DVHRT intervention and to choose which safety planning and advocacy interventions to participate in.

Strengths and Limitations

This study is limited in several ways. Data were collected between five and 16 years ago. Between 2003 and 2020, there have been changes in laws (for example, laws making strangulation a felony), policies (for example, VAWA was updated and reauthorized in both 2005 and 2013), services, and social norms regarding IPV (Messing, Ward-Lasher, Thaller, & Bagwell-Gray, 2015). As such, the context in which some of these data were collected may not reflect the criminal justice or social services environment today. Both response and retention rates are low; outcomes for survivors who were not interviewed or retained are unknown. Nevertheless, these data represent time- and resource-intensive efforts that are not common in research on IPV. Many IPV risk assessment instruments are developed using criminal justice data and predict rearrest. The DA-LE, however, predicts victim-reported violence. Although the outcome of near-fatal violence is rare and difficult to predict, the DA-LE predicts near-fatal violence with similar or better accuracy than other validated risk assessment instruments (Messing & Thaller, 2013). Although the predictive ability of the DA-LE is consistent with the predictive ability of IPV risk assessment in previous research, the relatively low PPVs on the DA-LE and within IPV risk assessment instruments more generally (Graham et al., 2019) should be considered a limitation across the field of IPV risk assessment. Analyses of data were conducted on independent construction and validation samples, enhancing both reliability and validity.

Follow-up data were collected seven to eight months after the initial interview. Criminal justice practitioners may be interested in shorter-term follow-up consistent with pretrial timelines, and social services practitioners may be interested in longer-term follow-up that accounts for the potentially ongoing nature of intimate relationships. Longer follow-up time frames using methods that could pinpoint dates of recidivism would provide additional relevant information. Offenders may have been incarcerated or otherwise unable to abuse their partners during the follow-up period or survivors may have sought additional services that enhanced safety. Whereas these possibilities affect the association between risk at baseline and violence at follow-up, they also mimic real-world situations. Finally, in these analyses there is attention to race and ethnicity. To our knowledge, most other research on IPV risk assessment has not specifically examined predictive validity specific to marginalized populations. Due to overpolicing in communities of color, fear of police, and differential treatment of victims and offenders based on race or ethnicity, it is imperative that research intended to inform the criminal justice response to IPV attend to these systemic inequities.

Conclusion

Development of the DA-LE was a data-driven, practice-informed process to address the need for an IPV risk assessment to be used in DVHRTs. Difficult decisions and trade-offs were necessary to create this risk assessment given the multiple requirements for the instrument. Specifically, the DA-LE is quick to administer, easy to score, and appropriate for use by law enforcement; it also predicts near-fatal violence with accuracy and informs risk management strategies. Risk-informed collaborative interventions may enhance outcomes for survivors of violence by holding offenders accountable, increasing help seeking, and reducing future assaults. This article presented one strategy for informing a criminal justice–social services collaboration that uses IPV risk assessment to identify those at high risk and develop risk mitigation strategies. **SWR**

REFERENCES

Adams, D. (2007). *Why do they kill? Men who murder their intimate partners*. Nashville, TN: Vanderbilt University Press.

Bechtel, K., Lowenkamp, C. T., & Holsinger, A. (2011). Identifying the predictors of pretrial failure: A meta-analysis. *Federal Probation, 75*, 78–87.

Bennett, L. W., & Williams, O. J. (2001). Intervention programs for men who batter. In C. M. Renzetti, J. L. Edelson, & R. K. Bergen (Eds.), *Sourcebook on violence against women* (pp. 261–277). Thousand Oaks, CA: SAGE.

Bent-Goodley, T. B. (2013). Domestic violence fatality reviews and the African American community.

Homicide Studies, 17, 375–390. doi:10.1177/10887 67913497949

Campbell, J. C. (2002). Health consequences of intimate partner violence. *Lancet, 359*, 1331–1336. doi:10.1016/ S0140-6736(02)08336-8

Campbell, J. C., Glass, N., Sharps, P. W., Laughon, K., & Bloom, T. (2007). Intimate partner homicide: Review and implications of research and policy. *Trauma, Violence & Abuse, 8*, 246–269. doi:10.1177/1524 838007303505

Campbell, J. C., Webster, D. W., & Glass, N. (2009). The danger assessment: Validation of a lethality risk assessment instrument for intimate partner femicide. *Journal of Interpersonal Violence, 24*, 653–674. doi:10 .1177/0886260508317180

Campbell, J. C., Webster, D., Koziol-McLain, J., Block, C., Campbell, D., Curry, M. A., et al. (2003). Risk factors for femicide in abusive relationships: Results from a multisite case control study. *American Journal of Public Health, 93*, 1089–1097.

Catalano, S. (2013). *Intimate partner violence: Attributes of victimization, 1993–2011*. Washington, DC: U.S. Department of Justice, Office of Justice Programs. Retrieved from https://www.bjs.gov/content/pub/ pdf/ipvav9311.pdf

Dobash, R. E., & Dobash, R. P. (2011). What were they thinking? Men who murder an intimate partner. *Violence Against Women, 17*, 111–134.

Dobash, R. E., Dobash, R. P., Cavanagh, K., & Lewis, R. (2004). Not an ordinary killer—Just an ordinary guy: When men murder an intimate woman partner. *Violence Against Women, 10*, 577–605. doi:10.1177/ 1077801204265015

Dobash, R. E., Dobash, R. P., Cavanagh, K., & Medina–Ariza, J. (2007). Lethal and nonlethal violence against an intimate female partner: Comparing male murder-ers to nonlethal abusers. *Violence Against Women, 13*, 329–353.

Dobash, R. P., & Dobash, R. E. (2012). Who died? The murder of collaterals related to intimate partner conflict. *Violence Against Women, 18*, 662–671.

Douglas, K. S., Guy, L. S., Reeves, K. A., & Weir, J. (2005). *HCR-20 violence risk assessment scheme: Overview and annotated bibliography*. Retrieved from http://kdougla s.wordpress.com/hcr-20/hcr-20

Ferraro, K. J., & Websdale, N. (2018). *Are intimate partner violence (IPV) risk assessment tools racially biased? Some observations from research and practice*. Battered Women's Justice Project, Minneapolis, MN.

Frye, V., Galea, S., Tracy, M., Bucciarelli, A., Putnam, S., & Wilt, S. (2008). The role of neighborhood environment and risk of intimate partner femicide in a large urban area. *American Journal of Public Health, 98*, 1473–1479.

Glass, N., Laughon, K., Campbell, J., Block, C. R., Hanson, G., Sharps, P. W., & Taliaferro, E. (2008). Non-fatal strangulation is an important risk factor for homicide of women. *Journal of Emergency Medicine, 35*, 329–335.

Graham, L. M., Sahay, K. M., Rizo, C. F., Messing, J. T., & Macy, R. J. (2019). The validity and reliability of available intimate partner homicide and reassault risk assessment tools: A systematic review. *Trauma, Violence, & Abuse*. Advance online publication. doi:10.1177/ 1524838018821952

Hanson, G. C., Messing, J. T., Anderson, J. C., Thaller, J., Perrin, N. A., & Glass, N. E. (2019). Patterns and usefulness of safety behaviors among community-based women survivors of intimate partner violence. *Journal of Interpersonal Violence*. Advance online publication. doi:10.1177/0886260519853401

Harden, J., Du, J., Spencer, C. M., & Stith, S. M. (2019). Examining attempted and completed intimate

partner homicide: A qualitative synthesis. *Violence and Victims, 34*, 869–888.

Johnson, M. P. (2006). Conflict and control: Gender symmetry and asymmetry in domestic violence. *Violence Against Women, 12*, 1003–1018.

Kellough, G., & Wortley, S. (2002). Remand for plea: Bail decisions and plea bargaining as commensurate decisions. *British Journal of Criminology, 42*, 186–210.

Klein, A. R. (2012). Lethality assessments and the law enforcement response to domestic violence. *Journal of Police Crisis Negotiations, 12*, 87–102.

Koppa, V., & Messing, J. T. (2019). Can justice system interventions prevent intimate partner homicide? An analysis of rates of help seeking prior to fatality. *Journal of Interpersonal Violence*. Advance online publication. doi:10.1177/0886260519851179

Koziol-McLain, J., Webster, D., McFarlane, J., Block, C. R., Ulrich, Y., Glass, N., & Campbell, J. C. (2006). Risk factors for femicide-suicide in abusive relationships: Results from a multisite case control study. *Violence and Victims, 21*, 3–21.

Lowenkamp, C. T., VanNostrand, M., & Holsinger, A. (2013). *The hidden costs of pretrial*. Retrieved from https://nicic.gov/hidden-costs-pretrial-detention

Maxwell, C. D., Garner, J. H., & Fagan, J. A. (2002). Inti-mate partner violence: Attributes. *Criminology & Public Policy, 2*, 51–80.

Messing, J. T. (2019). Risk-informed intervention: Using intimate partner violence risk assessment within an evidence-based practice framework. *Social Work, 64*, 103–111.

Messing, J. T., Amanor-Boadu, Y., Cavanaugh, C. E., Glass, N. E., & Campbell, J. C. (2013). Culturally competent intimate partner violence risk assessment: Adapting the danger assessment for immigrant women. *Social Work Research, 37*, 263–275.

Messing, J. T., Becerra, D., Ward-Lasher, A., & Androff, D. K. (2015). Latinas' perceptions of law enforcement: Fear of deportation, crime reporting, and trust in the system. *Affilia, 30*, 328–340. doi:10.1177/0886109915576520

Messing, J. T., & Campbell, J. (2016). Informing collabo-rative interventions: Intimate partner violence risk assessment for front line police officers. *Policing (Oxford), 10*, 328–340.

Messing, J. T., Campbell, J. C., Ward-Lasher, A., Brown, S., Patchell, B., & Sullivan Wilson, J. (2016). The Lethality Assessment Program: Which survivors of intimate partner violence are most likely to participate? *Policing, 39*. doi:10.1108/PIJPSM-08-2015-0094

Messing, J. T., Campbell, J., Webster, D. W., Brown, S., Patchell, B., & Wilson, J. S. (2015). The Oklahoma Lethality Assessment Study: A quasi–experimental evaluation of the Lethality Assessment Program. *Social Service Review, 89*, 499–530.

Messing, J. T., Patch, M., Wilson, J. S., Kelen, G. D., & Campbell, J. (2018). Differentiating among attempted, completed, and multiple nonfatal strangulation in women experiencing intimate partner violence. *Women's Health Issues, 28*, 104–111.

Messing, J. T., & Thaller, J. (2013). The average predictive validity of intimate partner violence risk assessment instruments. *Journal of Interpersonal Violence, 28*, 1537–1558.

Messing, J. T., & Thaller, J. (2015). Intimate partner violence risk assessment: A primer for social workers. *British Journal of Social Work, 45*, 1804–1820. doi:10.1093/ bjsw/bcu012

Messing, J. T., Ward-Lasher, A., Thaller, J., & Bagwell–Gray, M. E. (2015). The state of intimate partner violence intervention: Progress and continuing challenges. *Social Work, 60*, 305–313.

Milgram, A., Holsinger, A. M., Vannostrand, M., & Alsdorf, M. W. (2015). Pretrial risk assessment: Improving public safety and fairness in pretrial decision making. *Federal Sentencing Reporter, 27*, 216–221.

National Association of Social Workers. (in press). Family violence. In *Social work speaks: National Association of Social Workers policy statements, 2021–2023* (12th ed.). Washington, DC: NASW Press.

Neal, M. (2012). *Bail fail: Why the US should end the practice of using money for bail*. Washington, DC: Justice Policy Institute.

Petrosky, E., Blair, J. M., Betz, C. J., Fowler, K. A., Jack, S. P. D., & Lyons, B. H. (2017). Racial and ethnic differences in homicides of adult women and the role of intimate partner violence—United States, 2003–2014. *Morbidity and Mortality Weekly Report, 66*, 741–746.

Rice, M. E., & Harris, G. T. (1995). Violent recidivism: Asssessing predictive validity. *Journal of Consulting and Clinical Psychology, 63*, 737–748.

Rice, M. E., & Harris, G. T. (2005). Comparing effect sizes in follow-up studies: ROC area, Cohen's *d*, and *r*. *Law and Human Behavior, 29*, 615–620.

Richie, B. E. (2012). How we won the mainstream but lost the movement. In *Arrested justice: Black women, violence, and America's prison nation* (pp. 65–98). New York: New York University Press.

Roehl, J., O'Sullivan, C., Webster, D., & Campbell, J. (2005). *Intimate Partner Violence Risk Assessment Validation Study* [Final Report]. Washington, DC: National Institute of Justice. Retrieved from https://www.ncjrs.gov/pdffiles1/nij/grants/209731.pdf

Sabri, B., Nnawulezi, N., Njie-Carr, V.P.S., Messing, J., Ward-Lasher, A., Alvarez, C., & Campbell, J. C. (2018). Multilevel risk and protective factors for intimate partner violence among African, Asian and Latina immigrant and refugee women: Perceived needs for safety planning interventions. *Race and Social Problems, 10*, 348–365.

Simon, S. D. (2001). Understanding the odds ratio and the relative risk. *Journal of Andrology, 22*, 533–536. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/11451349

Smith, S. G., Zhang, X., Basile, K. C., Merrick, M. T., Wang, J., Kresnow, M., & Chen, J. (2018). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2015 data brief—Updated release*. Atlanta: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.

Snyder, R. L. (2013). A raised hand: Can a new approach curb domestic homicide? *New Yorker*. Retrieved from https://www.newyorker.com/magazine/2013/07/22/a-raised-hand

Spencer, C. M., & Stith, S. M. (2018). Risk factors for male perpetration and female victimization of intimate partner homicide: A meta-analysis. *Trauma, Violence, & Abuse*. Online publication. doi:10.1177/1524838018781101

StataCorp. (2015). Stata statistical software: Release 14 [Computer software]. College Station, TX: Author.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2) development and preliminary psychometric data. *Journal of Family Issues, 17*, 283–316. doi:10.1177/019251396017003001

Tadegge, A. D. (2008). The mental health consequences of intimate partner violence against women in Agaro Town, Southwest Ethiopia. *Tropical Doctor, 38*, 228–229.

Tartaro, C., & Sedelmaier, C. M. (2009). A tale of two counties: The impact of pretrial release, race, and ethnicity upon sentencing decisions. *Criminal Justice Studies, 22*, 203–221.

Thomas, K. A., Dichter, M. E., & Matejkowski, J. (2011). Intimate versus nonintimate partner murder: A comparison of offender and situational characteristics. *Homicide Studies, 15*, 291–311. doi:10.1177/1088767911417803

Thomas, K. A., Joshi, M., & Sorenson, S. B. (2014). "Do you know what it feels like to drown?": Strangulation as coercive control in intimate relationships. *Psychology of Women Quarterly, 38*, 124–137. doi:10.1177/0361684313488354

Violence Against Women Reauthorization Act of 2013, P.L. 113-4, 127 Stat. 54 (Mar. 7, 2013).

Wilson, M., & Daly, M. (1993). Spousal homicide risk and estrangement. *Violence and Victims, 8*, 3–16.

Jill Theresa Messing, PhD, MSW, is associate professor, School of Social Work, Arizona State University, 411 N Central Avenue, Suite 800, Phoenix, AZ 85004; e-mail: Jill.Messing@asu.edu. *Jacquelyn Campbell, PhD, MSN, RN,* is professor and Anna D. Wolfe chair, School of Nursing, Johns Hopkins University, Baltimore. *Kelly Dunne, BS,* is chief of operations and *Suzanne Dubus, BA,* is chief executive officer, Jeanne Geiger Crisis Center, Newburyport, MA.