E-Government Support for People in Crisis:
An Evaluation of Police Department Web Site Support
for Domestic Violence Survivors
Using ‘Person-in-Situation’ Information Need Analysis

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Abstract:

The crisis of intimate partner violence (IPV) requires a comprehensive array of government services in law enforcement, health, and social services. Impacting over five million victims in the U.S. annually, the beating, rape, stalking, assault, and other abuse of IPV force survivors to face multiple points of crisis. Repeatedly, most of these individuals move through separate dynamic situations that require different types of information.

Building from the research literature on IPV survivors’ experiences, this paper presents an original four-part framework of the Everyday Life Information Seeking (ELIS) information needs of IPV survivors. Using the person-in-progressive-situation approach of ELIS, this framework delineates 16 concrete information needs which occur throughout the four points of change: considering leaving an abuser, actually leaving an abuser, surviving after leaving, and long-term survival after leaving.

Police departments are the local government first-responders most directly responsible IPV survivors at the point of crisis. Their well-established use of community policing techniques require police to serve as key information gatekeepers for all crime victims but particularly for IPV survivors. Police departments are examined in light of this original framework to determine the extent to which their web sites address these situational information needs of IPV survivors.

Using the original four-part framework as an analytic lens, this examination of 172 police department web sites in the nation’s 100 largest metropolitan areas reveals major gaps in provision of essential information. Of these sites, 40% have no IPV information at all, 76% do not define IPV as a crime, 77% do not provide a phone
number for a local shelter, 73% do not provide any information on protective orders, 77% do not provide information on victims’ services, and 90% lack information on medical support.

Solving these problems requires more than simply filling the information gaps. The fundamental approach to local e-government social service information delivery must be firmly rooted in the information experiences of individuals’ situations. Findings are contextualized in terms of information theory most relevant to individuals in crisis; future research needs are delineated.
Introduction

The role of information in the individual’s response to a crisis, although incompletely mapped, is certainly profound. Crises send millions to their computers to seek and to share information. The international tsunami in December 2004 (Jones & Mitnick, 2006), the national 9/11 terrorist attack in 2001 (Blakemore & Longhorn, 2001), the regional Hurricane Katrina in 2005 (Jones & Mitnick, 2006), and the local shootings at Virginia Tech in April 2007 are emblematic of the large-scale crises that generate individual responses. Both individuals and e-governments at all levels increasingly rely on the Internet at such times (Bertot, Jaeger, Langa, & McClure, 2006).

Unlike these shared public crises, however, crises on the personal level take place behind closed doors. Here too, the Internet plays an increasingly central role in information seeking. Some of the more common medical crises (e.g., a diagnosis of cancer) have been studied in terms of medical information experiences (e.g., Kalyani, 2006) but socially-rooted, private crises are less well understood. Like their larger-scale counterparts, however, these acute danger situations often require the full panoply of governmental response, continue well-past any single trigger point, and demand sustained, engaged information use by survivors.

Problem Statement

In reference to one particularly prevalent and brutal personal crisis, this two-part paper is the first to examine both the crisis and the e-government response. Focusing on survivors of intimate partner violence (IPV), the first section of the paper lays out an original framework for the study of information needs of individuals in crisis. This
detailed examination of one type of personal crisis (IPV) provides a person-in-
progressive-situation analysis of information needs. (The nature of this analysis requires
extensive support from the research literature of several disciplines.) The second section
of the paper examines one type of e-government response to these information needs –
the support provided for those crisis survivors by their most immediate first-responder,
i.e., the local police department. This examination of first-responder information support
is both unique and overdue. This study, therefore, (1) proposes an IPV information needs
framework and (2) determines the extent to which police department web sites address its
elements.

Significant benefits accrue from this two-part study. Intimate partner violence
(IPV) continues to be a substantive criminal issue with far-reaching personal, health, and
economic consequences for victims. It also has a costly impact on society at large.
Social and public policy efforts increasingly require police departments to provide
information and referrals for victims. Many police departments incorporate the Internet in
their effort to fulfill this mandate by providing information on and making referrals to
appropriate social service agencies. Unfortunately, no person-in-progressive-situation
framework of concrete IPV survivor information concerns has been proposed. Likewise,
no actual analysis of police department digital support has been conducted. Given issues
of cyber-safety, navigation, accessibility, and confidentiality, the current IPV information
environment is quite complex but extensive interdisciplinary research on the situations
commonly faced by IPV survivors now makes a person-in-progressive-situation
information need framework possible. This two-prong approach identifies contextualized
information needs in and potentially dangerous information service gaps encountered by a highly vulnerable segment of the population.

**Impact and nature of IPV**

This problem holds social and economic significance for entire communities as well as intense, personal significance for each survivor. Although notoriously difficult to measure fully (Kilpatrick, 2004; Waltermaurer, 2005; Bonomi, Thompson, Anderson, Rivara, Holt, Carrell, & Martin, 2006), almost 5.3 million victimizations by intimate partners are reported every year among U.S. women age 18 and older (Centers for Disease Control, 2003). Although women who live below the poverty line and young women are more likely to be abused, this violence crosses all social, economic, educational, racial, and cultural boundaries (Heise & Garcia-Moreno, 2002; Shim & Hwang, 2005; Hicks, 2006; Lipsky, Caetano, Field, & Larkin, 2006; Klevens, J., 2007). Severe IPV attacks are four to six times more common among Black and Hispanic couples than White couples (Caetano, Field, Ramisettes-Mikler, & McGrath, 2005, 1039). Women with a history of domestic violence victimization have 60% more health problems than do women with no history of being abused (Campbell, Snow Jones, Dienemann, Kub, Schollenberger, O’Campo, & Carlson Gielen, 2002). Between lost work days and lifetime earnings lost through premature deaths, IPV costs top $8 billion (Reeves & O’Leary-Kelly, 2007, 328) in addition to the nearly $4.1 billion in direct medical and mental health costs (Centers for Disease Control, 2003). In households with children, forty to sixty percent of perpetrators also abuse their children (Goelman, 2004).

The gender-neutral term “intimate partner violence” should not obscure the fact that females-attacked-by-males constitute 85% of the victims of this crime; about 15% of
domestic violence is perpetrated within homosexual couples or by women against men (Rennison, 2001; McClennen, 2005). Unfortunately, females who are pregnant and/or caring for children are particularly vulnerable to IPV (Datner, Wiebe, Brensinger, & Nelson, 2007). As these statistics indicate, women are far more likely to be coerced, stalked, injured, hospitalized, sexually assaulted, raped, and murdered than men.

The complexities of the abusive relationship with an intimate partner make reporting the abuse extremely difficult for most survivors (Fugate, Landis, Riordan, Naureckas, & Engel, 2005), and actually leaving the abuser is even more serious. Estrangement is a significant risk factor in the murder of IPV victims (Campbell, Webster, Koziol-McLain, Block, Campbell, Curry, Gary, et al. 2003b, 1089). Paradoxically, many of these crime victims both fear reprisals from and desire to protect their abusers (Felson, Messner, Hoskin, & Deane, 2002). Some survivors hesitate to call police due to shame at the abuse, fear of reprisal, hope that the abuser will change, guilt for “provoking” the abuser, or sympathy for the abuser’s situation (e.g., loss of job) or condition (e.g., drunk) (Anderson, Gillig, Sitaker, McCloskey, Malloy, & Grigsby, 2003; Zink, Jacobson, Pabst, Regan, & Fisher, 2006). Many of those who are at the greatest risk of death will routinely underestimate their vulnerability (Campbell, 2004). Calling for police assistance correlates with greater severity and frequency of abuse, the abuser’s greater use of drugs and/or alcohol, children in the home, and newer relationships (Hutchison, 2003, 93). Simply reporting the crime can have a deterrent effect (Berk, Campbell, Klap, & Western, 1992; Felson, Ackerman, & Gallagher, 2005), however, and needs to be encouraged despite the difficulties in doing so (Hickman, 2003; Wolf, Ly, Hobart, & Kernic, 2003). Aggressive arrest policies actually relate to fewer deaths
among unmarried partners, although they have no apparent relationship to spousal homicide (Dugan, Ngain, & Rosenfeld, 2003, 191) while convictions reduce the likelihood of repeated abuse (Ventura & Davis, 2005). Effective separation requires cognitive (e.g., knowledge of police support), affective (e.g., belief that beatings are criminal), and behavioral (e.g., actively prepare an escape plan) elements to work in sync (Shurman & Rodriguez, 2006).

**Information support for IPV survivors**

The pervasive impact of IPV on communities as a whole makes a strong community response imperative. Police departments, victims’ services agencies, shelters, and others contribute substantially to the safety-net that helps survivors cope with or escape from abusive situations. Carefully coordinated partnerships between governmental and private agencies (Stover, 2005; Hochstein & Thurman, 2006; Muftic & Bouffard, 2007) as well as stand-alone agencies mount web sites, offer email support, mail out literature, give public talks, provide advocates, and staff hot-lines (Slack & Rowley, 2004). Many of these information distribution systems are, within the confines of limited budgets and volunteer-managed technical services, set up to reach people in all educational, economic, ethnic, racial, linguistic, and citizenship conditions (U.S. Department of Justice, 2007; Edwardsen & Morse, 2006).

These systems are used by three groups: the survivors themselves, their interpersonal networks, and the agency personnel charged with IPV care responsibilities. Although numerous studies confirm that victims prefer using informal information and support networks (Bowker, 1983; Harris, 1988; Harris & Dewdney, 1994; Harris,
Stickney, Grasley, Hutchinson, Greaves, & Boyd, 2001; Peckover, 2003; Goodkind, Sullivan, & Bybee, 2004; Gillum, Sullivan, & Bybee, 2006), many do make direct use of these formal information systems. Members of survivors’ preferred informal support network – their social and family connections, medical personnel, and clergy – also use these formal systems in their information seeking.

Since the late 1960s, local government efforts to mitigate the impact of IPV have gradually moved away from the policy of “not interfering in family matters” to providing substantive information for survivors while aggressively pursuing abusers (White, Goldkamp, & Campbell, 2005). From the first revisions in police policies on this problem, the use of information to help survivors navigate their legal and social support options has been recognized as valuable (Corcoran & Allen, 2005, 39-41; Weisz, 2005).

Police officers frequently provide at least minimal information orally, in writing, or both when responding to an IPV call. When that information is provided competently (e.g., timed properly so that the abuser does not see the information at all or does not view it as a threat, delivered with an appropriate affective attitude of respect and support, and followed with sufficient response to the survivor’s questions), then it actually empowers survivors by combining accurate data, personalized support, and responsive communication (Russell & Light, 2006). The stress and burnout of front-line police work (Lumb & Breazeale, 2002), particularly in modern “community policing” efforts (Thacher, 2001), is one of many concerns that can lead to perfunctory or rudimentary information distribution (Russell & Light, 2006). The unfortunately common necessity of returning to the same home again and again can make the repeated delivery of printed and/or verbal information problematic as some officers grow discouraged regarding the
potential efficacy of re-delivering the same information in the same format to the same crime victim. Some officers, therefore, may not follow through as carefully as they should on conveying the information (Lumb & Breazeale, 2002; Watkins, 2005). Having information available at all times via the Internet can be a useful, even critical, supplement. Information distributed by police is particularly useful in influencing women to reuse the legal system by, for example, reporting an offender’s violation of a protective order (Fleury-Steiner, Bybee, Sullivan, Belknap, & Melton, 2006, 339).

**E-government concerns**

Government efforts to maximize the use of networked, digital information include innovations designed to automate common processes and dis-intermediate, among other goals (Andersen, 2004, 5). Currently the customizable, one-stop site for citizens remains an unmet but bright goal (McGinnis, 2003; Tambouris & Wimmer, 2005).

In the United States, the rise of e-government at the federal, state, and local levels utilizes the Internet to deliver social service support efficiently, often within tightly limited budgets (Bertot & Jaeger, 2006; Gil-Garcia & Pardo, 2005). A common expectation is that information technology will increase “the efficiency and effectiveness of governmental operations” (Andersen, 2004, 41), even making “offline government more efficient and effective” (Atkinson & Leigh, 2003, 160). These parameters often conflict with efforts to design information resources that meet the varied needs of citizens who have different levels of physical, logistical, and cognitive access to the Internet (McNeal, Tolbert, Mossberger, & Dotterweich, 2003; Postmus, 2004). In the case of local police department web sites, the information provided supports both crime victims and
those members of their social and professional support networks who assist them. That mixture of end-users requires particularly thoughtful design.

Information concerns include the long-term educational requirements (Fidishun, 2001; Hillier, Mitchell, & Millwood, 2005) that survivors might have as they move through the escape and recovery process. Additionally, issues of cyber-security and accessibility for users with, for example, the vision and mobility impairments (Hoffman, Grivel, & Battle, 2005) that may result from abuse require careful consideration. The essential privacy and confidentiality concerns of survivors who fear location by their abusers remain incompletely addressed from both legal (Chatillon, 2005, 65) and technological perspectives (Hopkins, 2005, 234).

Increasing use of e-government for the delivery of social services impacts personal information-seeking efforts (Becker, 2005). Weak standards and inconsistent protocols make navigation more difficult than it need be (Gil-Garcia & Pardo, 2005). A large number of government websites still “require users to know which agency delivers the service that they are seeking” (Atkinson & Leigh, 2003, 167). Digital divide issues in terms of both access and mastery (Theofanos & Mulligan, 2004; Cullen & Hernon, 2006a; Cullen & Hernon, 2006b) continue as does the development of mitigating resources, such as community free-nets with instructional service integration.

**Theoretical framework**

This study is informed by Reijo Savolainen’s “Everyday Life Information Seeking” (ELIS) model, which posits active information-seeking as a useful behavior for problem-solving and life mastery (1995, 1999, 2004). ELIS behaviors vary along four
dimensions: information needs, affective states, cognitive mastery, and available resources (Savolainen & Kari, 2004, 431). The person-in-progressive-situation approach of the ELIS model contextualizes information needs in terms of their triggers (e.g., the children miss their home so the mother returns to the abuser) and their affective components (e.g., shame at asking for financial assistance), as well as the individual’s mastery of and access to information resources (e.g., an ability to search the Internet for help while the abuser is not at home). Finally, the ELIS model acknowledges the fluid nature of both human understanding and personal context, both of which are critical to understanding why IPV survivors stay in these abusive relationships and the complexities of moving towards safety. As understanding of social norms and personal strengths develop, the contexts in which individuals act may well change (McKenzie, 2003b). ELIS anticipates the possibility of change as problem-solving moves individuals into unfamiliar situations.

In 2002, Dunne proposed using Allen’s 1997 explication of the ELIS person-in-progressive-situation structure as a means of analyzing and understanding the dynamic and varied information needs of IPV survivors who move from their abusive situations through escape and on into independent living. The progression of such a trajectory was not, of course, proposed as a universal model or norm but rather as a series of potentially connected situations, each of which requires the ELIS approach to information analysis. In each situation, the survivor’s information needs, affective states, cognitive mastery, and available resources establish parameters for information experiences. Dunne’s proposal is taken one step further in this study with the development of a concrete person-in-progressive-situation framework.
**Person-in-progressive-situation framework**

Application of the ELIS person-in-progressive-situation approach to IPV survivors in order to develop a framework of concrete information needs requires two steps: identifying situations in which information might play a significant role, and identifying viable pieces of information in those situations which might be useful to survivors. Obviously, this proposed framework is only a first step in more extensive analyses and must be further developed and refined through reiterative research and analysis. Nevertheless, it builds directly from the research literature on IPV survivor situations and stands as the first person-in-progressive-situation analysis of IPV survivor information needs.

Identifying common situations and information-related problems for IPV survivors is currently feasible because, in the last decade, the research literature on intimate partner violence situations has grown substantially (Parmley, 2004). It now includes in-depth, multi-approach work in several fields including:

- criminal justice (e.g., Felson, et al, 2005; Hochstein, & Thurman, 2006; Russel, & Light, 2006);
- gender studies (e.g., Elizabeth, 2003; Goodkind, et al, 2004; Dobash, Dobash, Cavanagh, & Medina-Ariza, 2007);
- information studies (e.g., Harris & Dewdney, 1994; Harris, et al, 2001; Dunne, 2002; Westbrook, 2006);
- law (e.g., Goelman, 2004; Hickman, 2003; Dugan, Nagin, & Rosenfeld, 2003);
- medicine (e.g., Campbell, et al, 2002; Campbell, et al. 2003b; Lipsky, et al, 2006);
psychology (e.g., Wolf, et al, 2003; Fleury-Steiner, et al, 2006; Rajah, Frye, & Haviland, 2006);

public policy (e.g., Dugan, 2003; Fugate, et al, 2005; Whitaker, Baker, Pratt, Reed, Suri, Pavlos, Nagy, et al, 2007);

social work (e.g., Corcoran & Allen, 2005; Hutchison, 2003; Shim & Hwang, 2005); and

sociology (e.g., Berk, et al, 1992; Klevens, 2007; Weisz, 2005).

Throughout each of these fields, four situations appear repeatedly because they are inherent in many movements towards a safer life. Support and even intervention can be effectively delivered to IPV survivors when they enter any of these commonly studied situations (Kaukinen, 2004; Panchanadeswaran & McCloskey, 2007). The proposed framework is, therefore, built on these four situations:

1. considering the choice to leave the abuser, either temporarily or permanently;
2. considering use of the police as resources or protectors during and after the escape;
3. building a viable life immediately after escape;
4. constructing the basis of viable, long-term independence after escape.

These four situations vary endlessly in terms of each individual’s local resources, context, triggers, and domain knowledge – as well as the cultural norms and worldview through which all of these are filtered (Luna-Firebaugh, 2006; Ingram, 2007; Whitaker, et al, 2007).

Local resources, for example, include considerations such as the sufficiency of social service resources, judges’ willingness to grant protective orders, and the availability
of public transportation and low-income childcare. (See, for example, Amnesty International, 2007, for the impact of local resources on Native American women.)

• The broad context in which each survivor must interact with information varies in relationship to the actors involved (e.g., an emotionally disturbed child, an infant, an abuser who is a spouse, an abuser who is a member of the local police force, supportive family, parents whose own history of IPV precludes any real support) (Klevens, Shelley, Clavel-Arcas, Barney, Tobar, Duran, Barajas-Mazaheri, et al, 2007) and the fundamental life factors of the survivor (e.g., status as an illegal immigrant, college education, solid work history with job opportunities readily available, strong spiritual [Gillum, et al, 2006] and/or social network available, disability concerns [Brownridge, 2006]).

• Triggers for the survivor’s move into these situations vary in volition. Internal volition could develop, for example, from an abuser’s move to hurt a child for the first time. External volition could be pushed on a survivor if a neighbor calls in the police or if Child Protective Services threatens to remove children pending separation from the abuser. And, of course, the various forms of abuse trigger different volitional responses in different survivors; stalking and severe violence, for example, may actually shut down internal volition by inspiring strong fear (Logan, Shannon, Cole, & Walker, 2006).

• Individual domain knowledge about any of these four situations varies in terms of familiarity at a general level (e.g., just knowing that IPV shelters are available) and at a specific level (e.g., knowing that free legal aid is available in one county but not in another). Of course, inherent in any consideration of domain knowledge is also the
degree of meta-awareness held by individuals about their knowledge. For example, survivors who have moved from one city to another in a repeated effort to escape an abuser may develop sufficient meta-awareness to recognize that they need to relearn specific domain knowledge in each new city.

Additional situations certainly exist, such as choosing to stay in a long-term abusive relationship (Zink, et al, 2006). These four situations recur in the research literature, however, as nexus points at which social service and law enforcement intervention can be crucial. They form, therefore, the core of this initial person-in-progressive-situation framework. The process of moving towards a safer life frequently involves at least one of these situations.

While police are certainly not mandated, funded, or trained to provide active support for all aspects of these situations, the powerful and pervasive development of community policing models and problem-centered victim assistance programs has encouraged police departments to make referrals where possible and to clarify their own responsibilities (White, et al, 2005; Lumb & Breazeale, 2002; Thacher, 2001; Huisman, Martinez, & Wilson, 2005). Community policing, although sometimes problematic for IPV survivors (Rajah, et al, 2006; Hovell, Seid, & Liles, 2006), actually requires law enforcement policy to address the situations which crime victims and general citizens face.

Within the context of these four situations and the confines of community policing mandates, an interdisciplinary review of the past decade’s research literature on IPV survivor behavior sought to identify essential, unambiguous, discrete pieces of information that were potentially useful and/or commonly recommended to survivors in
each of the four situations. As the core of this proposed person-in-progressive-situation framework, the four situations were populated with these essential “content items” of information. Certainly other content items might be added later to further iterations of the framework, just as other situations might be added. These initial content items, however, were chosen with the community-policing context in mind as concerns of IPV survivors that a police department could reasonably be expected to address via a web site. The literature review ultimately generated a total of 16 content elements. Grouped by situation, each of the content elements is explicated below.

4-Part Person-in-Progressive-Situation Framework, with 16 information content items

A. *Considering the choice to leave the abuser, either temporarily or permanently:* When beginning to consider whether or not to try to leave an abuser, survivors commonly use three fundamental pieces of information as a launching point for active change in the abusive relationship. That change may be temporary (e.g., leave until the abuser completes anger management counseling) or permanent (e.g., obtain a divorce and leave the state).

1. The warning signs of an abusive relationship. A list of these warning signs can be the first external confirmation of a survivor’s perception of abuse. Since abusers often “blame” the abuse on other factors or people (e.g., their own temporary state of drunkenness or the survivor’s behavior in not having dinner ready on time), this simple list of behaviors that have been clearly labeled as abuse can empower survivors to reassess their situations or even trigger thoughts of escape (Campbell, Webster, Kozioi-McLain, Block, Campbell, Curry, Gary, et al, 2003a).
2. Safety or escape planning techniques. These techniques provide some concrete steps that an individual can take for physical protection. This protection may be more necessary if an abuser perceives any change in attitude or behavior that indicates an impending escape. Safety planning includes tactics for maximizing safety during an attack (e.g., try to keep an outside door/window available rather than hiding in a closet or bathroom) and escape planning includes tactics for actually leaving (e.g., wait till the abuser is out of the house and take a pre-packed sack of essential documents and clothes that’s been hidden outside).

3. Contact information for a safe house. Survivors may want to ask shelter staff about such matters as their physical safety at the house, ability to bring their children, facilities for their children, possible duration of a stay, potential for being reported to immigration officers or Child Protective Services, and requirements for utilizing shelter services. Simple access to a phone number that reaches a locally-based individual (as opposed to a national hotline) can be empowering both affectively and cognitively.

B. Considering use of the police as resources or protectors during and after the escape:

While some survivors effect an escape without any interaction with the police, others hesitate to ask for help with specific types of abuse (e.g., see Roberts, 2005 on stalking), and many make repeated use of the criminal justice system (Bonomi, Holt, Martin, & Thompson, 2006). Police, as first-responders and as experts in providing safety for citizens, are often viewed as a possible resource but they are also mistrusted for many reasons (Anderson, et al, 2003; Rajah, et al, 2006). These items provide concrete evidence of police willingness to seriously address the crime.
4. A referral to the police for help with IPV, either in general or to a specific unit/officer. While quite obvious and simple, a clear indication that the police do address this crime can be useful as a reinforcement of the survivor’s growing belief that the abuse is indeed criminal. Despite all that the abuser says, the behavior is actually viewed by the local police as illegal.

5. Definition or explanation of what constitutes IPV in that jurisdiction. While these can be overly legalistic in their use of jargon or written as formal policy, basic explanations of IPV provide survivors with concrete information regarding police mandates in this area.

6. A statement on or explanation of protective orders. Frequently mentioned, recommended, or even urged by police and safe house staff, protective orders (PO) prohibit abusers from approaching their victims. Unfortunately, the process for obtaining a PO can be complex and intimidating; the protection provided can be minimal when abusers are willing to risk arrest (Gillis, Diamond, Jebely, Orekhovsky, Ostovich, MacIsaac, et al, 2006). In some cases, a PO actually correlates with increased violence (Kingsnorth, 2006) so the decision to apply for one is not simple. An opportunity to learn more about PO may be needed in order to gradually gain sufficient domain knowledge for decision-making.

7. Referral to or explanation of the victim notification of the offender release process. When abusers are actually arrested or even imprisoned, the survivors have a respite in which to recuperate, move, and/or make other life changes. The constant fear of the abuser’s imminent return, however, can create anxiety that inhibits those moves towards safety. Knowing the process, if any, for receiving
warning of an impending abuser release provides some level of control for some survivors. From the community policing perspective, such notification provides active evidence of police regard for the survivor’s safety – above and beyond simply arresting the abuser initially.

C. Building a viable life immediately after escape: For those who do leave their abusers -- whether temporarily or permanently, whether via a shelter or a family -- referrals to four types of support provide access to commonly needed resources (Anderson, et al, 2003).

8. Referral to victims’ services program. In addition to providing financial and service support for survivors immediately post-attack, these services might also reinforce survivors’, perhaps, growing conviction that they are crime victims and that they are not to blame for the abuse.

9. Referral to any general social service agency, governmental or non-governmental, that has subsets of services for IPV survivors. While these resources vary a great deal due to local government and grassroots response to IPV, they can provide effective support. For example, a free local transit system pass for IPV complainants may get a survivor to work if the referral is made properly.

10. Referral to emergency shelter, other than the safe house. Safe house support is always limited in duration, sometimes quite limited. Knowing that they will not be homeless and that other shelters will be available if needed can provide encouragement for survivors who are particularly concerned about housing.

11. Referral to legal aid or assistance. Dealing with divorce, child custody, property, protective orders, civil restraining orders, residency status, and other aspects of
the escape process will often require legal expertise which IPV survivors lack and can not afford to obtain. In some jurisdictions, a lawyer is needed to make sure that PO are properly supported and cover the children and survivor’s parents or other involved relatives. Immediately after leaving, these legal issues can become acute (Whitaker, et al, 2007).

D. Constructing the basis of viable, long-term independence after escape: Although not needed by all survivors, these items are commonly required by the “hard-core” survivors, i.e., those who find it particularly hard to effect a permanent escape. The situation in which they must tackle their own-going needs without the immediate safety net of a shelter demands that they face, sometimes for the first time, financial, employment, health, and personal planning. Lacking well-established and familiar job, education, health, social support network, and/or other resources that lead them steadily towards an independent life once the initial escape has been effected, the hard-core survivors who need these five content items are the ones who come to the attention of the police on a repeated basis as they are abused repeatedly by the same perpetrator or continuously by a series of abusers.

12. Medical aid. As mentioned earlier, medical issues plague IPV survivors, some of whom do not get the opportunity to obtain long-term, substantive medical care until after they leave the abusive environment. Access to insurance, clinics, and other forms of medical aid can help survivors ameliorate the physical consequences of abuse (Dutton, Green, Kaltman, Rosesch, Zeffiro, & Krause, 2006; Whitaker, et al, 2007). In addition, research indicates that those most likely to be murdered by their partners are, due to serious injuries, significantly more
likely to be seen by medical personnel than by police or shelter staff (Campbell, 2004).

13. Job services. Certainly the financial independence of an appropriate job is essential for the long-term stability of most survivors. For those who have been deliberately prevented from obtaining employment, those who have been forced to relocate, and those who must now support a family alone, these jobs may be both essential and elusive. Anything from interview clothes to resume construction, however, can be useful.

14. Addiction recovery services. While addictions to alcohol and other drugs are not common among IPV survivors, those who self-medicate as a means of coping with physical and emotional trauma generally have little access to the long-term support services required to genuinely recover (Miller, 2006). Without these services, they are more likely to return to the abusers who promote their addictions and even, in some cases, provide the drugs. Given the natural tension between viewing the police as an IPV resource and viewing the police in terms of their law-enforcement role regarding substance abuse, some survivors weigh the latter more heavily.

15. Suicide prevention services. The despair and pain of dealing with the abuse may continue long after the abuser is gone. Post Traumatic Stress Disorder (PTSD) is common among survivors, and even those who avoid it can grow seriously depressed from the strain of avoiding a stalker, trying to build an emotionally viable new life, providing for a traumatized family alone, and other post-escape problems (Flouri, 2005; Miller, 2006).
16. Counseling services. The self-esteem problems, histories of child abuse, and other factors that contribute to patterns of involvement in abusive relationships may well require extended counseling (Houry, Kaslow, & Thompson, 2005; Miller, 2006; Zlotnick, Johnson, & Kohn, 2006).

Obviously these 16 pieces of information can be of use to different people in different situations. Item 12 (medical aid) could be useful at any moment and even item 1 (warning signs) can be useful for someone who is well on the way to post-escape long-term planning. Each item, however, is carefully associated with the situation in which information about it is most crucial and needed. For example, medical aid is offered and even imposed in the first three situations because it is part of the emergency response and shelter care system but information on it is most needed in the final situation where individuals must not only plan for ways to get it independently but may finally be focused on their own needs enough to recognize a need for medical support. Similarly, warning signs information can be useful as a reminder at any point but it is crucial in that first effort to contemplate escape because that situation is the one which requires a recognition of abuse in the individual’s life. The situations and needs are not mutually exclusive but each information need takes ascendancy in a different situation and the framework delineates those points of emphasis.

Proffered as a first step in developing concrete information need models for IPV survivors, this person-in-progressive-situation framework addresses four common situations and includes a total of 16 separate, discrete pieces of information. It draws from the literature of several disciplines with a focus on the information that pertains to community policing efforts.
Research questions

Building on community policing practices, many police departments use their web sites to provide information on in-house and external support services. The person-in-progressive-situation framework delineated above provides an analytic lens with which to examine police department web site support for IPV survivors. As explicated earlier, the research literature’s findings regarding this population’s particular needs for safety and ready information access underpin questions 2 and 3. The research questions are listed below.

1. In the police departments of the 100 largest U.S. metroplexes, which of the 16 information content items of the IPV person-in-progressive-situation framework are included?

2. In the police departments of the 100 largest U.S. metroplexes, which of the following access support elements pertained to the IPV information content items provided: linguistic diversity, site map inclusion, site search inclusion, cyber-safety warning, and fine motor skill requirements?

3. In the police departments of the 100 largest U.S. metroplexes, what level of navigational complexity, as indicated by click-path length, was required to reach the IPV information content items provided?

Web site analysis method

Web site selection: The web sites of the 172 police departments in the 100 most populous U.S. metroplexes were identified in a two-stage process. First, the U.S. Census
was used to identify the 100 most populous Metropolitan Statistical Areas (U.S. Census, 2003). Many of these M.S.A. actually included two to three separate cities, each of which was included in the study for a total of 172 cities. The cities thus identified were then used as the search terms in Google to find each city’s official web site; the police department site linked off of each city’s official site served as the base web site for that police department.

Data Collection and Analysis: The data were collected in a four-week period between April and May of 2006 with broken links revisited up to twice within 48 hours of the first contact to account for temporary connectivity problems. All links in all sites were live within that period of time. Each web site was analyzed in terms of the predetermined factors: 16 content items derived from the person-in-progressive-situation framework, 5 access elements, and link-path depth. These 16 content items were carefully defined to support rigorously consistent identification of each within all 172 sites.

In all 16 cases, four criteria were crucial to the definitions. First, the information must be designed to stand on a permanent basis; temporary sites, e.g., press releases or news briefs, were excluded. Second, the focus must be on the public’s information needs; in-house documents, e.g., internal procedures or meeting minutes, were excluded even when provided as part of a deliberate effort to have departmental work be as transparent as possible for the public. Items generated for internal purposes and shared were excluded; those designed for direct public use were included.

The third criterion helped establish the nature of a referral, a common information pattern in police web sites and one supported by community policing efforts. This
criterion required that the actual information appear directly on the police department web site; information found only after following links to other parts of the city’s site or other non-city agencies was excluded. This criterion permitted inclusion of referrals in that a referral provided essential identification of information as useful for IPV survivors; even if that information were actually located elsewhere, via an off-site link, the clarity of the referral qualified it to be counted as such. For example, a link reading “Sisters of Charity” would not be counted if it lacked any contextualizing statement to indicate that it was useful for IPV survivors; this simple listing would not count even if the link ultimately described a safe-house that the sisters run. If, however, the link read “shelter for abused women run by Sisters of Charity,” then that phrase, including the link, would be included as a referral on the grounds that the police page explicitly identified a resource for IPV survivors.

Finally, all information was required to be placed in the context of intimate partner violence. The law enforcement terminology for IPV generally identifies it as a subset of the larger areas of “domestic violence” or “family violence.” Individual officers and even entire administrative units, however, dealt with spousal abuse, domestic partners, stalking, and dating partners in violent situations. When descriptions, headings, explanations, or other text brought the other aspects of “domestic violence” or “sexual assault” into a page as an additional element, then the material was still included on the grounds that the IPV focus of the page was well established. The growing awareness of teen-dating violence has made it, for example, an area of IPV concern even though the survivor is not living with the abuser (Centers for Disease Control and Prevention, 2006; Ocampo, Shelley, & Jaycox, 2007). Since sexual assault and rape are certainly weapons
in the arsenal of both abusive intimate partners and strangers, both may overlap with IPV information. When the information was primarily for IPV survivors, the addition of newer subsets of IPV (such as dating violence) or related areas (such as sexual assault) had no effect on the determination to include the information.

Those 16 elements within the context of those criteria could occur throughout a departmental web site. This study was designed to examine the content of the police web sites, not their usability; the practical limitation set on manually reviewing the pages for these 16 pieces elements was, however, rooted in the basic user pattern of examining about two pages per search (Fallows, 2005, 1). Erring on the side of inclusion, a limit was set on page examinations of triple that common number. Therefore, from the homepage of the police department web site, every single link was followed for at least six levels. At any of the six levels, those pages that contained any explicit mention of intimate partner violence were followed through until such time as the linked pages no longer contained relevant information. At all points along those paths, note was taken of the 16 content items delineated above.

Access elements and link-path depth: Five access elements -- language, site map, site search, cyber-safety, fine-motor skill -- were tracked. In addition, navigational complexity – operationalized as number of layers from home page to IPV information-- was noted. The five access elements were chosen for their potential to support or inhibit access for this particular population. The site was credited with having non-English content if any page within a site was available in a language other than English, either directly or through a site translator. Site maps and site searches were tracked and are detailed below. Cyber-safety (i.e., any of several possible means of helping a site visitor
prevent an abuser from tracking the user’s visit to the site) was sought in some detail but rarely available in any form. Fine-motor skill was operationalized as the ability to mouse-over a line of text, a difficult task for someone with hand/arm injuries or blackened eyes.

Limitations

The limitations of the study are inherent in the examination of government web sites. This is not an evaluative study. The accrediting body for law enforcement agencies (C.A.L.E.A.) has no national standards on this matter, which means that there are no recognized criteria against which it is possible to evaluate the sites. This is not a usability study, although one certainly needs to be conducted on each city’s site. As a first step in understanding the issues involved in local e-government service to IPV survivors, this study uses the original person-in-progressive-situation framework that was developed from the interdisciplinary research literature on IPV. The 16 information items of that framework function, therefore, as content elements. Since the framework is not a standard, however, these 16 items are not evaluative criteria.

These web sites may be created by professional web managers, by civilians working for the departments, by general city employees, by officers within departments who provide raw content to web managers, and a number of other configurations. With no standard chain of responsibility for the structure or content of the sites, the police departments may have limited control over the final outcome.

In terms of data gathering, the sites are in constant flux and this analysis is only a snapshot of a moving target. The population includes the largest metroplexes where
funding and technology may combine with more advanced law enforcement efforts to lead the way in web site utility. It is not a nationally representative sample in that it leaves out the smaller communities that could, conceivably, have greater web site control and the potential for closer community policing ties or, alternatively, fewer resources for up-to-date training in the entire arena of IPV.

In terms of data analysis, having only one set of eyes on so many thousands of pages could have resulted in some missed data but the systematic and detailed work on each department’s site minimizes that concern. The use of an Excel spreadsheet, screen captures, and notes on each site combined to make careful tracking of each site’s content both thorough and complete.

Findings: content

IPV survivors who are reviewing their support options often consider or are urged to consider the police as one possible resource (Felson, et al, 2002). Those considering that option sometimes try to learn more about what might happen if they did risk making such a call. How seriously would their call be taken? What sort of help might they expect to receive? Those who examine police web sites for such information would, in these 172 cities, generally find IPV information since 60% of the sites had at least one of the 16 content items available. As Table 1 indicates, fully 40% of the sites actually had one to four separate web pages with IPV information. A total of 6% had five to six pages, 7% had seven to ten pages, 4% had 11-20 pages, 1% had 21-30 pages, and 2% had 31-52 pages.

[insert Table 1]
Of course, the nature and quantity of the information on those pages is a separate matter but the fact that 40% of the sites had nothing at all is certainly appalling.

**Content for first situation: considering the choice to leave the abuser**

IPV survivors who begin to think about actively responding to their situations need information that helps them develop their understanding of the three points mentioned earlier as the foundation of change. As Table 2 indicates, less than one-fourth of these sites provided warning signs, safe house contact information, or exit/safety plans.

[insert Table 2]

Practicing “sense-making” at its most fundamental (Dervin, 1998), these people are using information to define and recognize both their situation and their options. First, the abuse must be recognized as such. That is, it must be seen as wrong, abnormal, undeserved, and/or inexcusable. That recognition can be nurtured with descriptions of the classic warning signs of abusive relationships (e.g., limiting access to family and friends, controlling finances, shoving, and threats). While certainly not the primary responsibility of police, identifying these warning signs of abuse can have a powerful influence on some individuals who are just beginning to question an abusive life which they see as normal or common. In these police sites, only 19% included that information.

Once abuse is recognized as such, then information on safety or escape planning can help survivors who are looking for a way to move towards a safer life. Since actually separating from the abuser is a point of tremendous physical danger (Campbell, et al, 2003b), the concrete and detailed advice in these plans can be life-saving. For example, escape plans include ways to hide money and documents so that they can be picked up if
a physical attack necessitates departure in the middle of the night with children in hand. Survivors might, quite legitimately, think of the police as a reliable resource for information on a safety plan. Unfortunately, only 14% of the sites provided this information.

The most basic item is, of course, contact information for a safe house. Having a secure place to go is often an absolutely essential element of making the decision to leave an abuser. While all safe houses have phone numbers, relatively few have web sites and even fewer have email. Nevertheless, only 23% of the police sites provided a phone number; 9% gave web sites and 1% gave emails. Every one of these cities had a shelter within reach of its citizens; shelter phone numbers could have been provided on all of the sites.

Content for second situation: considering engaging the police

On a police web site, four pieces of information would help demonstrate the determination of the department to prosecute the crime and support the survivors’ efforts to escape. Although police may well assume that their determination is inherently manifest, many survivors have trouble trusting that the police will respect them, understand their situation, and actively protect them (Felson, et al, 2002). In order to establish and/or bolster their cognitive authority (McKenzie, 2003a; Wilson, 1983) as professionals who are intimately conversant with the insular “life in the round” (Chatman, 1999) of IPV, police could be explicit about their responsibilities and primary resources. Therefore, these four pieces of information can be of substantial use to
survivors. As Table 3 indicates, over half of the sites provided at least one of these information items.

[Insert Table 3]

First, some simple referral to the fact that the police address this crime is useful, preferably with contact information for individuals or units specializing in the crime. A referral to the police was missing on 43% of the sites. One possible reason for this gap is the police department’s unfamiliarity with the information gatekeepers (Metoyer-Duran, 1993) of the IPV survivor’s world. Working within their own law enforcement context in which domestic violence is clearly a crime (although, prosecuted more vigorously in some jurisdictions than in others), the police may not recognize the impact of IPV information gatekeepers who are, quite often, the abusers. These people rarely define their own actions as reprehensible and often cast the survivor or some outside force (e.g., alcohol) as the cause. By stepping up as information gatekeepers on so fundamental a point, police could make a meaningful difference for some survivors.

In addition to knowing that the police address the crime, IPV survivors may need to know how the crime is defined in their jurisdiction. Some survivors are unaware that death threats, choking, stalking, killing pets, destroying phones (the means to call for help), property destruction, and spousal rape are actually illegal despite what their abusers, and sometimes their social network members (Carlson, & Worden, 2005), may tell them. Among certain immigrant populations, this definition can be particularly crucial since some countries impose virtually no limits on men’s behavior (Bhuyan, Mell, Senturia, Sullivan, & Shiu-Thornton, 2005; Sullivan, Senturia, Negash, Shiu-Tornton, & Giday, 2005; Crandall, Senturia, Sullivan, & Shiu-Thornton, 2005). Of the 172 sites,
only 24% defined the crime to some extent. In some cases the definition was taken directly from the appropriate statute but others were jargon-free explanations or lists of illegal behaviors. Domain knowledge (Marchionini, 1995, 66) of what is, essentially, a legal matter is certainly beyond the cognitive experience of many survivors. Police can help them bridge that information gap better than anyone else because the fine shades of that essential first determination of an action’s legality is not only their area of expertise but also their professional responsibility.

The third item pertaining directly to the police is the use of protective orders. Often urged by shelter staff and police alike as a powerful first step in moving towards safety, protective orders require survivors to trust that police will respond quickly and effectively to violations, to utilize a complex criminal justice system which requires that they document their need for the order, and, in some cases, to face their abuser in court (Fleury-Steiner, et al, 2006). The confusion between civil and criminal law makes this particularly critical in that police can not generally enforce civil restraining orders but they can enforce various kinds of criminal protective orders. Information on protective orders was provided on 27% of the web sites.

At the moment of crisis, when police have been called to a home for an IPV situation, they often recommend a protective order. Having information on that complex process available for review after the crisis has passed may help survivors understand what protection it offers and their role in obtaining it. The value of delivering information at the point of need is well established (Marchionini, 1995; Belkin, 1980) but the cyclical nature of IPV needs means that some people have not “a” point of need but several. Protective orders are both useful and complex; they both increase protection and
fail to guarantee it. Those contextual elements create points of need that can be difficult to navigate. For those who have safe web access, the opportunity to find the information again from the same people who provided it initially can be comfortable both cognitively and affectively.

The fourth police-related information item pertains to communication between the criminal justice system and the victim. Police will charge, hold, and release abusers; survivors often need notification of that release. In some situations, the abuser can be released within a few hours of the initial arrest. Retaliation attacks can be extremely dangerous, making this notification critical for some individuals (Dobash, et al, 2007). The national victim notification system, known as VINE (Victim Information and Notification Everyday), is available in most states to some degree and in most major cities (Bureau of Justice Assistance, 2006; Appriss Data Network, 2007). Only 8% of the sites included any mention of the victim notification processes.

Knowing in advance that they will have warning before an abuser is released could encourage survivors to take the risk of calling the police for help in the first place. The ELIS focus on integrating both the cognitive (e.g., understanding the post-arrest process) and affective (e.g., fearing an unexpected return of the abuser) motivators in information-seeking certainly applies in this context.

Content for third situation: building a life immediately after escape

Survivors are more likely to make a successful move towards safety, including following through on prosecutions (Gillis, et al, 2006), if they can get appropriate economic and social support (Felson, et al, 2002). Women go back to their abusers when they lack the child support and income required to feed the children, for example. With
that in mind, referrals to social services from the police site not only support survivor efforts to move towards self-sufficiency but also demonstrate law enforcement’s understanding of the complexities of the situation. This effort exemplifies the use of information to develop trust, a quality useful in establishing the kind of long-term relationship required to investigate and successfully prosecute a crime. As Table 4 indicates, at most one-third of the sites included one of these information items.

[insert Table 4]

Of the 172 sites, 23% mentioned victims’ services programs – available in every state thanks to the Victims of Crime Act (Office for Victims of Crime, 2007). These programs are implemented locally but generally provide some level of financial and informational support for crime victims as they work to recover from their experience. IPV survivors may grow to rely on their victims’ services officer for advice throughout the prosecution process (Corcoran & Allen, 2005); an early connection to the office can serve as information scaffolding (Halttunen, 2003) to help a survivor move from a general to a specific resource.

Similarly, information referrals to other local support agencies can lower the affective load (Nahl, 2005) of irritation, fear, and anxiety with which survivors must cope. Including both governmental and non-governmental organizations, at least one social service agency referral was made on 33% of the sites.

Some cities have too few safe-house beds to meet demand; others have safe-houses that will not accept women who are being treated for mental disorders, men, or women with teenage sons. In those situations, having a referral to an emergency shelter
can be essential for someone planning to leave an abusive home; 22% provided such referral information.

In most cases, some form of legal information is needed to navigate the civil and/or criminal court systems. Financially secure IPV survivors are likely to find legal aid through common channels but those who lack such resources and/or channels may need support. Although many cities and counties have legal services, only 17% referred site visitors to a legal aid center. Each of these types of aid can be of immediate help for someone leaving an abuser.

**Content for fourth situation: constructing the basis of viable, long-term independence after escape**

Additional assistance is sometimes required on a long-term basis. Particularly when the abuser has the funds to obtain a lawyer who can repeatedly delay criminal proceedings until civil divorce and custody proceedings have been concluded, the survivor may go for months or even years with no resolution, insufficient financial support for the children, continual threats, and even attacks. With under-trained police officers (Huisman, et al, 2005), ambivalent court officials, and an intimidating judicial process (Gillis, et al, 2006), the problems simply multiply. To support a survivor’s efforts to maintain both a separation from the abuser and a prosecution against such odds, long-term support is often needed. As Table 5 indicates, very few of the 172 web sites recognized this broader context in which separations and prosecutions take place by making referrals to long-term service resources.

[Insert Table 5]
Overall, the level of information provided is clearly insufficient for critical, police-related, general, and long-term information needs. Of these 172 sites, 40% have no information at all, 76% do not define IPV as a crime, 77% do not provide a phone number for a local shelter, 73% do not provide any information on protective orders, 77% do not provide information on victims’ services, and 90% lack information on medical support. None of this information is complex or difficult to locate; much of it could simply consist of links to the local safe-house web site. The local e-government approach to social service in the criminal justice context, however, may not take the information-seeker’s perspective as a starting point for site content.

**Findings: access issues, including cyber-safety**

The information provided must, obviously, be accessible to the end-users who, in this case, have a few particularly crucial access issues. As Table 6 indicates, access issues were not commonly considered in these sites.

[insert Table 6]

Language is an access issue of more significance in some communities than others. Since IPV survivors are disproportionately from immigrant communities (National Coalition Against Domestic Violence, 2005a), the IPV segment of police web sites should be considered a top priority when translations are considered. However, only 13% of the sites had IPV information available in a language other than English.

For more experienced end-users, site maps and site searches can provide baseline access. Unfortunately, 95% had no mention of IPV in their site guide although broad departmental links would, eventually, lead to useful information from such starting points.
as “family violence” or “detective division.” Using “domestic violence” as a search term did yield hits on 51% of the sites. Certainly, the basic e-government approach in web site design is, in these cases, still focused on the perspective of the creating entity rather than that of the end-user.

As police departments make increasing inroads in fighting cyber-crime, they are becoming more cognizant of the criminal use that abusers make of the Internet on a local level. As mentioned before, 60% of the sites had information of potential use to IPV survivors but only 1% of the 172 sites had any sort of cyber-safety notice to warn these crime victims that their abusers could track their use of the material. Safe-house sites and various national sites provide pop-up windows, escape buttons, and warning panels to help survivors mask their use of the web as an escape tool. For example, the U.S. Department of Justice Domestic Violence site warning panel suggests that the “safest way to find information on the Internet would be at a local library.” The National Coalition Against Domestic Violence (2005b) has a bright red “escape” button on every page that sends the user to a blank Google search box; if an abuser walks into a room in which a survivor is accessing the site, that escape button can prevent an attack by hiding the survivor’s activity from the abuser. The Texas Council on Family Violence site has a pop-up window that provides cyber-safety information and an escape button available thereafter. Unfortunately, the compartmentalized nature of police departments may make it difficult for the IPV officers and/or the web managers to gain a full understanding of the need for cyber-safety information in this context. All sites could provide warning panels readily; pop-ups and escape buttons might be added as enhancements become fiscally and technically viable.
Only 6% of the sites required use of fine-motor skills to access information. The physical dexterity needed to “mouse over” a line of text and the visual acuity required to follow the cursor through the process are not always available to people who have blackened eyes and injured hands or arms. The clean, simple access to information was a significant strength of the sites.

**Findings: navigation**

Navigation was examined in terms of click path length. Some of the paths may not have been followed readily by end-users but that concern is a separate matter best examined empirically. The click path aspect of this study was designed to systematically determine the path length alone, not the usability of the site. Starting from the department’s home page, the paths were followed for at least six levels regardless of their overt connection to IPV. For example, the homepage (the 0-click point) of one department included a link to “Bureaus” (the 1-click point) which led to “Investigations” (the 2-click point) then “DV/Elder Abuse” (the 3-click point) then “Domestic Violence” (the 4-click point) to get to actual information on, rather than simply a pointer towards, IPV. The path requires 4 clicks off the homepage and was therefore registered as a 4-click navigation path.

A total of 5% had IPV information actually on the homepage (a zero click path), 35% had information at 1 click, 39% at 2 clicks, 26% at 3 clicks, 10% at 4 clicks, 2% at 5 clicks, and none at all at 6 clicks. Obviously some sites had information at more than one level.

[insert table 7]
As Table 7 indicates, 68 sites had at least one 2-click path but several of those had more than one such path so that 157 such paths were found among those 68 sites. While 18 sites had at least one 4-click path, they contributed to a total of 136 such paths. Navigating was most commonly productive within one to three clicks, a reasonable, if not ideal, level of access.

**Implications**

E-government efforts to provide locally rooted, substantive information on significant social problems, such as intimate partner violence, would benefit from greater cohesion of policy, practice, and usability research. Although policy is set and administered at the local level, appropriate national organizations (such as the national accrediting body, C.A.L.E.A., and the national police administrators’ association, The I.A.P.C.) could provide a model, template, or guidelines for departments to use in this area. Such policy initiatives should encourage survivor-based content, cyber-safety support, and effective navigation.

From a practice perspective, since 40% of the sites had no information at all, the obvious first step is to encourage provision of basic information. With social workers, clergy, physicians, nurses, employers, counselors, family members, friends, and others searching for information on IPV, police departments are certainly obligated to maximize the flexibility and reach of the Internet in support of IPV survivors’ support networks. Even if they believe that few IPV survivors would Google their sites, police department administrators must carry community policing practices into cyberspace.
Utilizing the web’s flexibility can provide copies of the sites in the languages most appropriate to survivors’ linguistic needs. Similarly, cyber-safety is a critical aspect of this web work and must be built in from the beginning. Finally, from a usability perspective, police departments might be encouraged to maximize use of local resources if their municipal IT department does not offer that service. For example, they could build on their relationships with local safe houses to garner feedback on sites. Those with local information schools could offer their site’s design as a class project. Although few police departments have the resources for thorough, in-house usability analysis on this particular population, every effort to maximize effective information delivery is worth considering.

The one-stop shopping goal of e-government designers may not be the most effective means of meeting personal crisis needs. The long-term, reiterative, and multi-faceted situations in which IPV survivors find themselves may actually benefit from layered or contextually organized information provision. Only empirical analysis of contrasting information delivery options can determine the optimal design goal. As a baseline, however, using police department web sites to provide fundamental information and essential referrals maximizes the Internet’s ability to help local government reach these crime victims as well as the community and social-network partners who support their movement toward a safer life.

Finally, the person-in-progressive-situation framework requires further examination in terms of its effectiveness as an analytic lens. In-depth feedback on this study’s four situations, as well as their information elements, from IPV survivors, police officers specializing in IPV work, shelter directors, and other IPV stakeholders could
refine and develop this application of the framework. Understanding the relationships among the four situations more fully, in terms of their information need implications, would support more effective web site design. This type of focus on the framework will also further test its limits as an analysis tool. While this particular application of the framework appears to have provided a functional and useful analysis of both IPV survivor information needs and the police department web sites, additional research is required to determine the broader efficacy of this approach.

E-government’s next iteration must build from the user’s world view in the provision of social service support. Responsive, flexible, and substantive information support can link citizens to the resources and services which best meet their needs but such an approach demands that e-government web site designers recognize the dynamic situations in which their sites are utilized. To become effective information gatekeepers, e-government site designers must provide cognitive and affective support for individuals in crisis. Understanding the information needs of each progressive crisis situation is the essential first step towards the goal of effective e-government service.

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