Police Response to Intimate Partner Violence:
Influences on Decision-Making

BY

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THESIS
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SUMMARY

This research seeks to understand factors associated with police action in response to intimate partner violence. As intimate partner violence continues to be a significant social problem for which we rely on the criminal justice system, specifically on police, it is important to understand the factors that shape officer decision-making. Intimate partner violence is a common (Hirschel, Dean, & Lumb, 1994) and often repeat call for police service, as well as the cause of serious injuries and death. In order to improve outcomes for survivors, it is critical that the context and action that police take in these calls be better understood. This study expands the use of the Decision Making Ecology framework previously employed in child welfare research to police, another type of public service decision-maker. The Decision Making Ecology framework posits that the threshold for decision-makers to act is influenced by case level factors, decision-maker factors, and organizational and community-level factors, as well as by foreseeable consequences, all of which explain both the process and context in which decisions are made (Fluke, Baumann, Dalgleish, & Kern, 2014). Research on intimate partner violence has considered many of these factors, although not always simultaneously, and most often not within the context of a theoretical framework. Additionally, officer perception of risk of future violence and decision-making is not well understood, particularly in conjunction with factors specific to the Decision Making Ecology. Building on this past research, as well as on the findings of qualitative interviews completed with police officers about their perceptions of their role and response options in intimate partner violence calls (Fulambarker, 2014), this study addresses limitations of past research by examining arrest decisions within the theoretical guidance of the Decision Making Ecology and by further exploring the role of officer perception of risk in arrest.
SUMMARY (continued)

This study utilizes a cross-sectional, correlational design with self-administered questionnaires of police officers from multiple police departments in suburban Chicago. The questionnaire prompted officers to report about a recent domestic violence call to which they responded and also collected organizational and officer specific variables. The findings suggest that case-related factors and officer assessment of risk are influential in the decision-making process. Further, officer assessment of risk is influenced by some case-related factors and also impacts arrest decisions. These findings have implications for future research aimed at understanding the role that officer assessment of risk plays in the decision-making process, particularly the factors that are associated with higher and lower assessments of risk of future violence. Understanding these influences in officer decision-making and assessment of risk has potential to shape police training and policy, as well as to identify opportunities for advocacy for services and support for survivors.
I. INTRODUCTION

The 2008 National Crime Victim Survey found that women experienced 552,000 nonfatal violent victimizations (4.3/1,000 women) and men experienced 101,000 (0.8/1,000) (Catalano, Smith, Snyder, & Rand, 2009), and as such, it is clear that intimate partner violence (IPV) continues to be a significant social problem to which law enforcement officials are the primary responders. Police officers serve as gatekeepers to the criminal legal system and often the first contact that survivors have with the system, and as such, it is imperative to investigate the influences in officer decisions. While the response of police has been critical to the safety of many women, research demonstrates that this response is complicated and can be problematic for some. It is critical to understand for whom and under what circumstances negative outcomes occur. Investigating officer decisions can offer insight into the role that both factors with legal relevance (such as the presence of an injury), and those factors that fall outside the law (such as race or sex) play in cases of intimate partner violence.

Previous research on police decision-making in intimate partner violence cases is not grounded in strong theoretical frameworks that explain why police may take certain actions and the influences that may guide their decisions. Much of the current research utilizes what Sherman (1980) termed a “systematic classificatory framework” (p. 69), which looks at different categories of variables that impact outcome decisions, such as case-specific factors, or those pertinent to the police officer. While the significance of these variables has been demonstrated, there are limitations in both the methodology and theoretical grounding of these studies. These studies have typically employed vignette survey methods (Stewart & Maddren, 1997; Phillips &
Sobol, 2010), the use of police records (Eigenberg, Scarborough, & Kappeler, 1996), or national crime databases (Hirschel & Buzawa, 2013; Eitle, 2005). A few authors have employed observational methods to record police decision-making (Sun, 2007). Very few studies use data obtained directly from police officers about a specific case to which they responded (Robinson & Chandek, 2000a; Robinson & Chandek, 2000b), and typically these studies do not also collect other pertinent officer demographic or department information. Numerous authors have considered situational factors, as well as a variety of factors specific to the police officer, police department, and, less frequently, the community in which the incident occurs. The understanding of risk perception and police action in domestic violence is limited to the development of tools that would help an officer to ascertain the risk of future violence (Wordes, 2000) or future homicide (Campbell et al., 2003), with fewer studies focusing on the officer perception of risk and how this perception influences call resolution decisions (Stalans & Finn, 2000).

Some authors employ theoretical frameworks to select the variables of interest (Robinson & Chandek, 2000b; Eitle, 2005; Worden, 1989), while others have relied on previous police decision-making research to choose variables that may be influential (Tatum & Pence, 2015). This study will address this gap by using the Decision Making Ecology framework, which incorporates case, organizational, community-level, and decision-maker factors with an explanation of the decision-making process. The Decision Making Ecology model has been used in child welfare research to explore the decision making of child welfare workers in a variety of settings. The Decision Making Ecology was designed to understand the source of decision errors made by child welfare workers (Baumann, Dalgleish, Fluke, & Kern, 2011). Influenced by other decision-making literature, the Decision Making Ecology (DME) uniquely captures a variety of
components that comprise the complex situations in which child welfare workers make decisions. Similarly, police officers are faced with unpredictable situations and the responsibility to make complex decisions on a regular basis. This model is used in this study within a policing context to consider a broad range of potential influences to officer decision-making and identify the impact risk assessment on the threshold to act.

A. **Key Concepts & Terms**

The term intimate partner violence (IPV) is often used synonymously with domestic violence (DV); however, there are important distinctions between the two terms. DV is the term utilized in legal contexts and by police officers to include the violence that occurs within the home and between individuals that have some relationship, such as being family members, roommates, or intimate partners (Kelly & Johnson, 2008).

While DV includes violence between intimate partners, there are major differences in the theoretical explanations of violence within families (i.e., family violence) versus that between intimate partners (i.e., intimate partner violence). The most fundamental of these differences is the gendered perspective that situates intimate partner violence within structural oppression of women, rather than a family violence perspective that focuses more prominently on the internal family structures and stressors that lead to violence within families (Gilfus, M.E., O’Brien, P., Trabold, N., & Fleck-Henderson, A., 2010). Family violence researchers focus on a variety of family conflict issues and the data sets utilized in these studies seem to show that women perpetrate violence at an equal rate as men (Kelly & Johnson, 2008; Langhinrichsen-Rohling, 2009). The feminist perspective approaches the social problem as one that is grounded in a patriarchal structure that supports male violence against female victims (Hunicutt, 2009), and acknowledges that women are the majority of victims (Tjaden & Thoennes, 2000). Many
contemporary feminists include intersectionality (Crenshaw, 1991; Crenshaw, 2005) as a part of the gendered perspective, which brings into focus the fact that the experience of partner violence occurs within contexts created by the intersections of systems of power (for example, race, class, gender, and sexual orientation) and oppression (prejudice, class stratification, gender inequality and heterosexist bias). (Bograd, 2005, p. 26)

This study will consider intimate partner violence, which is defined as the pattern of actual or threatened physical, sexual, or psychological abuse, including coercive practices, that is perpetrated by a current or former spouse or non-marital/dating partner against the other partner, including different and same-sex couples (Saltzman, Fanslow, McMahon & Shelley, 2002). As will be discussed below, legal statutes addressing intimate partner violence include a wider range of interpersonal violence. The term domestic violence is used interchangeably in this study as it reflects the language used by police departments and the criminal justice system. Similarly, while the term survivor is most often utilized within a feminist perspective, the terms victim and offender are used in this study as these mirror the language that police officers use.

B. Domestic Violence Statutes

While this study will define intimate partner violence as indicated above, the state statutes that cover intimate partner violence also cover a wider range of domestic violence. These statutes vary by state in the range of circumstances and burdens that must be met to make an arrest and the recommendations for what action officers should take (Zeoli, Norris, & Brenner, 2011). A significant change in statutes across the country in the 1980s allowed police to make warrantless arrests, which do not require officers to witness the violent incident in order to make an arrest (Zeoli, Norris, & Brenner, 2011). While warrantless arrest exists in all fifty
states, the degree to which police officers have discretion in making arrests and employing other resolution actions varies. Zeoli, Norris, and Brenner (2011) summarize the definitional scheme they used in categorizing state policies:

Statutes that allow the officer to decide whether to arrest (often using the phrase “may arrest”) are termed discretionary; those that allow the officer to decide whether to arrest, but also convey a state preference for arrest, are termed preferred; and statutes that seem to require officers to arrest (often stating that officers “shall arrest”) are termed mandatory. (p. 2814)

Within the state of Illinois, the site of this study, the Illinois Domestic Violence Act (1986) states that:

Whenever a law enforcement officer has reason to believe that a person has been abused, neglected, or exploited by a family or household member, the officer shall immediately use all reasonable means to prevent further abuse, neglect, or exploitation… (750 ILCS 60/304 Ch. 40, par. 2313)

This provision demonstrates the discretion available to officers to arrest, but also suggests a variety of other actions that are at an officer’s disposal, such as providing victims with referrals and written information, escorting victims to retrieve personal items from the home, and advising medical treatment and transportation (750 ILCS 60/304 Ch. 40, par. 2313). In addition, the statute specifies a range of actions that an officer should take if an arrest is not made, such as filing a report, informing a victim of his/her rights, advising medical treatment, and seizing weapons if appropriate (750 ILCS 60/304 Ch. 40, par. 2313-4, Sec. 304 b1-3). This statute protects a range of individuals including:
Spouses, former spouses, parents, children, stepchildren and other persons related by blood or present or prior marriage, persons who share or formerly shared a common dwelling, persons who have or allegedly have a child in common, persons who share or allegedly share a blood relationship through a child, persons who have had a dating or engagement relationship, persons with disabilities and their personal assistants, and caregivers (750 ILCS 60/304 Ch. 40, par. 2331-3, Sec. 102-6).

Finally, while the definition of intimate partner violence as a phenomenon provided above includes psychological abuse, it is important to distinguish that the Illinois state statute defines abuse as “physical abuse, harassment, intimidation of a dependent, and interference with personal liberty or willful deprivation” (750 ILCS 60/103 Ch. 40, par. 2311).

C. Scope of the Problem

1. History

Historically, the criminal-legal system treated domestic violence as a private family matter and sanctions were not widely imposed by police (Schechter, 1982). Several factors contributed to the shift toward a formalized, criminal legal response. First, the efforts put forth by the activists in the Battered Women’s Movement advocated for a response from law enforcement and legislation (Schechter, 1982). In addition, a number of lawsuits against police departments for negligence and/or gender discrimination in cases of domestic violence demonstrated both the inaction of law enforcement and the need for change. Research findings from the Minnesota Domestic Violence Experiment (Sherman & Berk, 1984) concluded that arrest was an effective deterrent to future violence. These findings sparked change in policies regarding arrest in domestic violence cases (Sherman & Cohn, 1989), however these findings were later countered by mixed results in replication of the study in other cities (Sherman,
Schmidt, & Rogan, 1992). Phillips and Sobol (2010) summarize that the intent of these laws is to provide protection for victims, deter future violence, and alleviate the decision of victims to press charges. These laws include thresholds that a case must reach before an arrest can be made, with these factors differing by state (Zeoli, Norris, & Brenner, 2011). On the national level, the Violence Against Women Act (VAWA) passed as a portion of the Violent Crime Control and Law Enforcement Act of 1994 includes provisions for training police officers and funding for those departments that encourage arrest, as well as a ban on assault weapons, which has since expired.

2. **Prevalence and incidence**

Intimate partner violence is a social issue that is estimated to affect between 15% and 71% of women globally, with the range varying by country (Abramsky et al., 2011). More specific population studies indicate that 10–69% of women aged 15–49 years experienced physical abuse by a male partner at least once in their lifetime (World Health Organization, 2010). A 2001 report on the findings of the National Violence Against Women Survey indicated that in the U.S., 1.3 million women experience physical assault each year (Tjaden & Thoennes, 2000). A more recent report based on the findings of the 2008 National Crime Victim Survey found that women experienced 552,000 nonfatal violent victimizations (4.3/1,000 women) and men experienced 101,000 (0.8/1,000) (Catalano, Smith, Snyder, & Rand, 2009). Additionally, there were 2,340 homicides committed by an intimate partner in 2007, of which 70% of the victims were women (Catalano, Smith, Snyder, & Rand, 2009). In IPV cases with female victims, 99% of offenders were male compared to 83% of female offenders in cases with male victims (Catalano, Smith, Snyder, & Rand, 2009). While not all cases of IPV are reported to and
subsequently handled by the police, research demonstrates that the response by the police and the wider criminal justice system can be problematic for women who do report.

3. **Experiences with police**

   For some women who utilize the police when faced with IPV, the experience has been reported as helpful. Several authors have researched the satisfaction of victims with police. Lewis, Dobash, Dobash, and Cavanagh (2004) found that the majority of victims (55%) were happy with police involvement and 81% found the police to be helpful or very helpful. Using in-depth interviews, Stephens and Sinden (2000) found that most victims whose encounter did not result in arrest had negative experiences and categorized officer demeanor as: minimizing the situation, disbelief of the victim, lack of care or concern, and macho or arrogant. When victims reported events that resulted in arrest, however, they reported a more positive experience. These findings should also be considered in light of research that demonstrates that victims may be more satisfied with police when their expectations are met (Wilson & Jasinski, 2004). There are some problematic aspects of police action that should be considered further. Some research suggests that police contact may result in the arrest of victims themselves (Hirschel, Buzawa, Pattavina, & Faggiani, 2007). Conversely, many survivors want the abuse to cease but do not want to see their partners arrested or jailed (Zeoli, Norris & Brenner, 2011; Garcia & McManimon, 2011). Further, separation due to arrest of offenders poses a risk of increased violence in the future (Fleury, Sullivan, & Bybee, 2000).

4. **Court response**

   Within the court system, research has shown that prosecution and conviction rates for domestic violence cases are low. Hirschel and Hutchinson (2001) found that approximately 64% of cases in their sample did not result in prosecution. For most of these cases, the
prosecutor voluntarily dropped the charges. For those cases that were prosecuted, the only factors found to significantly impact the decision to prosecute was injury to the victim and victim preference (Hirschel & Hutchinson, 2001). Several authors also note that the tendency to not prosecute intimate partner violence has a negative circular effect that creates reluctance on the part of law enforcement to arrest (Garcia & McManimon, 2011; Henning & Feder, 2005) and officer frustration (Horwitz et al., 2011). For those cases that are prosecuted, the result is often not a conviction. A Bureau of Justice Statistics report found that 56% of cases in a sample of 16 urban counties resulted in conviction (Smith & Farole, 2009). Research also shows that many survivors find themselves secondarily victimized by actors in the system, including police, judges and other personnel (Alvazzi del Frate, 2012). Finally, in investigating the response of law enforcement and the criminal justice system it is critical to consider institutionalized racism and how structural oppression influences experiences and outcomes for people of color (Richie, 2005).

D. **Police Discretion**

Despite the policies outlined above, police officers still act as “street-level bureaucrats” that must utilize professional judgment to implement these policies (Lipsky, 1980). As Lipsky (1980) discusses, police discretion is an inevitable byproduct of both the vast number of regulations that officers enforce and the human element of each situation. As Lipsky (1980) states, “to the extent that tasks remain complex and human intervention is considered necessary…discretion will remain characteristic of many public service jobs” (p. 16). While some think that discretion is an undesirable aspect of policing, others assert that it is a necessary use of professional judgment by police officers (Kleining, 1996; Davis, 1996). Just as with emergency room physicians, Kleining (1996) argues, police officers must use situational factors,
knowledge and experience to make decisions. The use of discretion by police, particularly in IPV cases, is not fully understood. This research attempts to fill this gap by further exploring officer action within a framework, the Decision Making Ecology, to assist in understanding decisions made in the context of discretion.
II. CONCEPTUAL FRAMEWORK

A. Police Decision-Making Frameworks

Research on the decisions made by police officers is discussed within the context of discretion. Police officers are tasked with implementing the law; however, the uniform enforcement of the law is not possible and, arguably, not desirable (Kleining, 1996). As police officers operate under a limited amount of direct and immediate scrutiny (Lipsky, 1980) and are tasked with addressing situations in a short amount of time with limited information, the study of decision-making with police has attempted to understand how and why decisions are made in certain situations and not in others. One criticism of police decision-making research is the lack of strong theoretical grounding for understanding how and why officers make these decisions (Kane, 2000).

Black (1971) used observational research to understand police arrest decisions specifically, drawing the generalizations that: 1) arrest situations most frequently occur through citizen-initiated situations; 2) arrest mainly occurs based upon victim preference; 3) police officers utilize their powers to arrest less often than the law allows; 4) evidence is an important factor in the decision to arrest; 5) arrest is more probable the more serious the crime; 6) arrest is more likely when there is greater relational distance between the offender and the victim; 7) arrest is more likely when the suspect is disrespectful; and 8) findings did not demonstrate a pattern of racial discrimination on the part of police in arrest situations. Current research continues to rely on these generalizations and concepts to choose variables to examine in exploring IPV arrest decisions (Lally & DeMaris, 2012). To the final point, Black (1971) found
that police did arrest black individuals at higher rates, but explained this finding based on the observation that black individuals showed a higher level of disrespect toward police.

Black’s (1971) finding related to increased arrest of and disrespect displayed by black individuals certainly warrants future exploration to elaborate on perceptions of disrespect based upon race, as well as understanding the act of disrespect as a development of resistance identities (Rios, 2012), which serve to operate as a means to push back against the source of oppression. As Rios (2012) articulates, some individuals may “develop practices that seem to embrace criminality as a means of contesting a system that sees them as criminals” (p. 50). Framing demeanor and resistance in this way is particularly critical within the contemporary context of widespread scrutiny of racial bias and police use of force, and increased awareness of institutionalized racism.

Sherman (1980) brings together a “systematic classificatory framework” (p. 69) to summarize the findings of prior policing research on causes of police behavior in a variety of situations. He explored the following police behaviors: detection activities (style of patrol, reporting, and stop and questioning), arrest decisions, service behavior including demeanor, and violence (use of force) (Sherman, 1980). He summarized the findings of the research on police behavior to that date, grouping the factors influencing police behavior into individual, situational, organizational, community, and legal aspects (Sherman, 1980). At the time, the findings were limited and very few used multivariate procedures to fully understand the relationship between and among variables (Sherman, 1980). Despite the limitations of these findings and Sherman’s (1980) assertion that “none of these approaches constitutes a substantive theory of police behavior,” much of contemporary police research utilizes such a classificatory framework (p. 70). Riksheim and Chermak (1993) replicated the Sherman (1980) review with
research on police action post-1980s and summarized that these studies found that situational factors of demeanor of suspect and victim preference predicted arrest, while others, such as gender, race and age of the suspect continue to have unclear influence. The authors conclude that arrest decisions may have more to do with situation-specific factors as opposed to predetermined stereotypes. While this “classificatory framework” identifies aspects (situational, organizational, legal and community factors) that are similar to the Decision Making Ecology, which will be used in this study, it lacks robust statistical evidence to support the categories, and furthermore does not offer an explanation of how these categories influence actions. Other theories, such as Schema theory and Attribution theory attempt to more meaningfully understand how officers think about or attribute blame in a situation, and how that may influence how an officer acts.

Schema theory has been used previously to explain police decision-making, including bias and arrest decisions of police officers. Researchers have used Schema theory to specifically look at police decisions related to domestic violence (Stalans & Finn, 1995; Finn & Stalans, 2002; Robinson, 2000), sexual assault, and mental health (Watson, Swartz, Bohrman, Kriegel, & Draine, 2014), and to explain gender or racial bias in police decision-making (Smith, Makarios, & Alpert, 2006; Smith & Alpert, 2007). As presented by Axelrod (1973), a schema is “informally…‘a pre-existing assumption about the way the world is organized’” (p. 1248) and can be used to understand how individuals use previous experience and knowledge to interpret new information. In a policing context, Schema theory helps to explain the prior knowledge and experiences officers develop and how officers might use this knowledge to interpret and make decisions in a new situation. There are a variety of different terms used to describe the schema, or ways of processing new information, such as “frames” (Stalans & Finn, 1995) or “scripts”
(Watson et al., 2014) that police officers develop. Officers’ frames or scripts develop based on previous experience responding to a specific type of call (domestic violence, mental health-related) or specific attributes (demeanor, race, age), and can be shaped by training (Watson et al., 2014; Stalans & Finn, 1995), agency culture (Stalans & Finn, 1995), or shifts in policy (Robinson, 2000).

Robinson (2000) tested the hypothesis that officer schemas related to domestic violence would change based on recent policy changes and would impact police officer decisions; however, the findings did not support a difference in arrest decisions based on policy related schema. Stalans and Finn (1995) investigated whether officers rely on beliefs about the appropriateness of victims (normative frames) or assessing the likelihood of future harm to avoid “glaring errors and bad press” in making arrest decisions (efficiency frames) (p. 293). The authors found that police officers with these frames assigned different levels of dangerousness and blame to both victims and offenders when signs of mental illness were present, but they did not find a difference in arrest decisions between these types of frames. In understanding racial bias, the development of scripts about criminality and racial groups can help explain disproportionality in arrests (Smith & Alpert, 2007), although the impact of race within a broader context of factors in domestic violence decision-making is not fully understood (see Literature Review section).

Attribution theory has also been used to consider officer perceptions about a situation, particularly focusing on how officers assign responsibility or blame and how this impacts their actions. Research on policing using Attribution theory has looked at responsibility or blame as assigned by officers in cases of domestic violence (Markowitz & Watson, 2015; Tang, 2003). In exploring domestic violence involving veterans with signs of serious mental illness, Markowitz
and Watson (2015) found that in cases where officers attributed the cause of the domestic violence to be internal rather than external to the offender, they were more likely to utilize punitive measures such as arrest. Tang (2003) found that Chinese police officers were more likely to attribute blame to offenders rather than victims and in cases of physical abuse compared to non-physical abuse, both victims and offenders were held more responsible. This study did not link the attribution of blame to any resolution decisions.

While Schema theory and Attribution theory are both useful in understanding the meaning that individuals make of a situation and the blame they assign in such situations, these theories are both limited in explaining how the meaning and assignment of blame impact actions, particularly in consideration of other factors associated with a case. For example, in examining police response to domestic violence, prior research demonstrates that case factors are consistently linked to officer decision to arrest and it is unclear how these theories account for these types of factors. Other research focuses on aspects of the context of police decision-making, such as organizational influences explained by organizational theories (Eitle, 2005; Johnson, 2010), or community context explained by social disorganization theories (Browning, 2002); however, these studies each theoretically support only one aspect of the context of police decision-making. The Decision-Making Ecology will be discussed as a theory that may address the limitations of other theories or frameworks to understand the full context of decision-making and offer an explanation of how decisions are made in intimate partner violence cases.

**B. Conceptual Framework: Decision-Making Ecology**

A theoretical framework used in child welfare decision-making research guides this study to understand factors that influence police decision-making in cases of intimate partner violence. The Decision-Making Ecology (Baumann, Dalgleish, Fluke, & Kern, 2011) was designed to
understand the source of decision errors made by child welfare workers (Baumann, Dalgleish, Fluke, & Kern, 2011). Influenced by other decision-making literature, the Decision Making Ecology (DME) uniquely captures a variety of components that comprise the complex situations in which child welfare workers make decisions. Similarly, police officers are faced with unpredictable situations and the responsibility to make complex decisions on a regular basis. In both cases, the implications and risk for families are great. The DME accounts for influences on the threshold to act, or decision making, which include case, organizational, external, and decision-maker factors. This section will review components of the DME, as well as studies that have supported the viability of the framework.

C. **Overview of the Decision-Making Ecology**

The Decision-Making Ecology (DME) framework places the understanding of decision-making within the context in which those decisions are made (Baumann, Dalgleish, Fluke, & Kern, 2011). The model (Figure 1) considers the influence of case factors, organizational factors, external factors, and decision-maker factors on the process of decision-making. Further, this model explains the process of decision-making, including the process of assessment and making the decision to act (Baumann, Dalgleish, Fluke, & Kern, 2011).

The factors included in the model not only individually influence the decision-making process, but are also thought to influence each other. This framework was created with the goal of understanding the source of errors in decision-making, which differs greatly from past work in child welfare that focused on addressing these errors through safety and risk assessment tools rather than on isolating the source of the errors (Fluke, Baumann, Dalgleish, & Kern, 2014). Organizing and uncovering the influences on decisions can improve the process of decision-
making (Baumann et al., 2010). This model provides a “theoretical and testable basis for understanding the context, process and outcomes or consequences” of decisions (Fluke, Baumann, Dalgleish, & Kern, 2014, p. 470). This framework has been used in past child welfare research to understand a variety of decisions made by child welfare workers including placement decisions (Fluke et al., 2010) service and removal decisions (Rivaux et al., 2008), and substantiation decisions (Dettlaff et al., 2011). This previous research has demonstrated the predictive power of this framework and has resulted in a greater understanding of the decision-making context and factors that may mediate or change the threshold to act (Fluke, Baumann, Dalgleish, & Kern, 2014).

1. Decision-making influences

The DME outlines four categories of factors that are thought to influence the threshold to act, or make a decision. Baumann, Dalgleish, Fluke, and Kern (2011) summarize
that a range of factors, including those related to the case, as well as the influence of organizational, community, and decision-maker factors have in the decision-making process. Further, the assessment of benefits and consequences (outcomes) of prior decisions also impacts future decisions (Baumann, Dalgleish, Fluke, & Kern, 2011). Outcomes related to safety may be measured as the influence that a fatality or serious harm that comes to a child after a worker decides to not remove a child would have on future decisions (Baumann, Dalgleish, Fluke, & Kern, 2011). Outcomes may also be external to the worker, such as media attention on a case, or relevant to the decision-maker themselves (Baumann, Dalgleish, Fluke, & Kern, 2011).

a. **Case factors**

Case factors are aspects pertinent to the subjects and circumstances of the situation. Within the context of child welfare decisions, case factors can include type of maltreatment, risk of harm, safety, and characteristics of the child and family (Fluke, Baumann, & Dettlaff, n.d.). In prior research, race and poverty, as well as assessment of risk, were found to impact both substantiation and placement decisions (Dettlaff et al., 2011; Rivaux et al., 2008).

b. **Organizational factors**

Organizational factors are the characteristics of the agency context in which the decision maker operates. In the child welfare context, these include agency resources and caseloads, support and cohesion of the unit, and policies (Fluke, Baumann, & Dettlaff, n.d.). Fluke et al. (2010) found that the proportion of aboriginal youth on the agency caseload increased the likelihood of placement.
c. **External factors**

Fluke, Baumann, and Dettlaff (n.d.) describe external factors as laws, funding and critical community events. Considered in this model are community level factors that impact child maltreatment. Examples include levels of crime and poverty, as well as levels of social support. One study found that as community disorganization increased (as measured by crime, impoverishment, residential instability and child care burden), so did the relative odds of placement in state custody (Jantz et al., 2012).

d. **Decision-maker factors**

Finally, decision-maker factors are those characteristics that are particular to the decision-makers themselves. These may include the experience, skills, comfort, and orientation of the worker (Fluke, Baumann, & Dettlaff, n.d.). Baumann et al. (2010) found that caseworkers’ perceptions of their own interpersonal skills were related to removal decisions. The evaluation found that the higher the self-rating of interpersonal skills, the lower their propensity to remove African American children from their homes.

e. **Decision-making and outcomes**

The above factors are considered to directly influence decision-making and outcomes (see Figure 1). First, decision-making (the diamond shape in Figure 1) is considered to include the range or continuum of decisions made by the worker and the psychological process of decision-making (Fluke, Baumann, Dalgleish, & Kern, 2014). These two components are discussed below. Additionally, this process of decision-making has results or consequences based upon the decision that is made (the rectangle shape in Figure 1). The feedback arrows in the model indicate the potential for foreseeable consequences to impact the decision-making process and the decision threshold, as well as the potential to influence future
decisions (Fluke, Baumann, Dalgleish, & Kern, 2014). These outcomes may also be those that are perceived by the worker in a case or those that actually occur, as decisions occur over time and past outcomes in the same case, or other similar cases, may influence future decisions in the case (Baumann, Dalgleish, Fluke, & Kern, 2011). The relevant studies of police decision-making that also consider these factors in intimate partner violence cases will be reviewed in the Literature Review chapter.

D. The General Assessment and Decision-Making Model

The Decision Making Ecology considers the “psychological process of decision-making” and makes a distinction between a judgment and a decision (Baumann, Dalgleish, Fluke, & Kern, 2011, p. 7). A judgment is the assessment of an incident, such as the level of risk or concern, and the decision is acting upon the situation. This model assumes “a threshold for action that turns an assessment of a situation into a decision-about action” (Baumann, Dalgleish, Fluke, & Kern, 2011, p. 7). This threshold, the point at which the assessment moves to a decision to be made and is affected by the history and experience of the decision maker (Fluke, Baumann, Dalgleish, & Kern, 2014, p. 468). If one’s threshold is high, a greater amount of evidence would be needed before taking action, and a lower threshold requires less. Finally, the shift in this threshold is the third component that is posited to compose the decision-making process. A shift would occur if the amount of evidence needed to reach the decision threshold shifts. These shifts can be differentially influenced by the decision-making factors discussed above. Research on disproportionality in the child welfare system (Rivaux et al., 2008; Dettlaff et al., 2011; Baumann et al., 2010) demonstrates that race and poverty and perceptions of risk can differentially impact decision-making and shift this threshold to act.
While there is substantial research on police decision-making, our understanding is still limited and will be strengthened by examining multiple influences within a comprehensive framework previously used to understand decision making, such as the Decision Making Ecology. The DME offers a framework that considers the complexity of decisions made by public service workers faced with interpreting situations and making decisions. Utilizing this framework, this study sought to understand the influences of case factors, organizational factors, external factors, and decision-maker factors, as well as to investigate if perception of risk influences the threshold to act on a range of police actions in intimate partner violence cases.
E. **Conceptual Definitions**

This study utilized the components of the DME as described above to categorize variables that may influence police action in IPV cases. These variables are those that have been found to be significant in past research, as well as less investigated variables that are central to the DME framework (such as organizational or community-level variables and perception of risk). It was thought that the inclusion of these variables would allow for a more comprehensive understanding of contextual influences on decision-making. However, as will be discussed in further detail in the Methodology chapter, the organizational and external variables could not be tested due to large amounts of missing data. Further discussion of these variables can also be found in the Methodology chapter.

1. **Dependent Variable**

The dependent variable in this study is the decisions made by police officers after responding to a domestic violence incident. The police actions that can resolve a domestic situation include arrest, informal action, and no action. Arrest is defined as being held by police in handcuffs, in a police car, or held in a police station. Warrantless arrest is allowable under the Illinois Domestic Violence Act (1986), which allows officers to make an arrest if they have probable cause to believe a crime under the act has been committed (750 ILCS 60/301). Note, however, that the Act does not mandate arrest in cases of domestic violence and police officers have discretion in deciding when to make an arrest. Informal actions include those that officers may take when they choose to or are unable to take more formal action. Additionally, officers may employ these informal actions in addition to utilizing arrest. These can include actions taken to assist a victim to prevent future abuse, such as completing a police report, transporting a victim to the hospital or shelter, and/or informing victims about obtaining an order of protection.
Additionally, informal action directed at the suspected offender may include asking the perpetrator to leave the scene. No action is defined as an officer not completing any of the actions explained above. This research included variables capturing informal actions as arrest is not always appropriate and/or the victim may prefer the officer to not make an arrest; however, officers may still take steps to prevent future abuse by taking informal actions, as listed above. Information on these informal actions was collected, but due to the number of possible informal actions and these options not being mutually exclusive (an officer could endorse a variety of informal actions with or without arrest), they could not be fully explored in the statistical models. Informal actions and no action were collapsed to one category (no arrest) as few officers indicated they took no action. Future analysis will explore these informal action decisions.

2. Independent Variables

The independent variables of interest in this study included variables within the categories of case factors, organizational factors, external factors, and decision-maker factors. The specific variables within each category are included based upon the conceptual framework and prior research on police arrest decision-making in IPV cases. Additionally, officer assessment of risk was explored to uncover if differential assessment of risk can help to explain decision-making, or an officer’s threshold for action.

a. Case factors

The case factors considered in this study are defined as details specific to the situation to which an officer responded. These factors include both legal factors that are defined as information that can constitute probable cause for an arrest, as well those factors that are extralegal and thus should not have an impact on police actions. These factors include the presence of an injury, presence of weapons, witnesses, a willing complainant and a present
offender, and a violation of an order of protection. Additionally, demographics such as the age and race of the victim and suspected offender, as well as the relationship between the two parties, and substance use by either party were collected. These variables were explored as they relate to the victim, offender, and the situation itself.

b. **Organizational factors**

Organizational factors are those factors that are specific to the police department to which an officer is assigned. The organizational factors covered within the scope of this study included the department for which an officer works, the number of officers per capita, and the proportion of female officers in the department.

c. **External factors**

External factors are those community level variables that may influence police action. Poverty rates, state domestic violence policies, urban versus rural communities, and education levels have been considered in past research and found to be significant. As all departments of interest were within the state of Illinois, state policies were not considered in this study. Rates of people below the poverty level was to be used as the external factor of interest in this study.

d. **Decision-maker factors**

The decision-maker factors are those variables that describe each individual police officer. Among the variables that are considered in this study are officer sex, officer race, years of experience, and additional domestic violence training. Officer perception of the demeanor of the victim and offender is also considered as a decision-maker factor. Finally, officer perception of risk was investigated for influence on arrest decisions, as well as a
mediating variable. Perception of risk includes officers’ ratings of risk of future violence for the case to which they responded.

Together, the understanding of case, organizational, external, and decision-maker factors as well as the perception of future risk allow for a more detailed understanding of both the decisions officers make and why they may do so.
III. LITERATURE REVIEW

There is an established body of literature that explores police officer decision-making in intimate partner violence cases, primarily investigating the arrest decision. This review of the literature will summarize these findings according the categories of the conceptual framework, identifying the situational, organizational, community, and decision-maker (police officer) characteristics that have been investigated in regards to their influence on arrest decisions.

A. Case Factors

The majority of research predicting arrest in intimate partner violence cases focuses on case or situational factors, and finds that these variables have the greatest influence on police decisions. These factors are the details of the specific case and are related to the involved parties and the circumstances of the situation. Some researchers distinguish between legal factors versus those that are extralegal (those that have legal significance) rather than those that do not (Dichter, Marcus, Morabito, & Rhodes, 2011). In other words, the presence of an injury may indicate the commission of a crime and therefore a legal factor, whereas the race of a suspected offender or victim should have no legal bearing on a criminal legal decision (but may). For some variables this distinction is less clear: for example, victim preference may be considered a legal factor (a victim’s willingness to sign a complaint in a jurisdiction that does not support prosecution without victim cooperation) or extralegal if it is equated with the level of cooperation or demeanor of a victim. Factors, both those considered legal and extralegal, are discussed as they pertain to the victim, suspected offender, and the situation itself.
1. **Victim and offender characteristics**

Characteristics of the victim and offender include demographic variables such as race, age, and sex, as well as substance use. Past research considers demographic variables for both the victim and offender, yielding mixed results on the influence of these extralegal variables.

Eitle (2005) specifically investigated the influence of extralegal variables (in addition to organizational variables) on arrest decisions. Black victims were found to be less likely to have their cases result in arrest, but the race of the perpetrator was not significant (Eitle, 2005). Interestingly, in a model that considered the moderating effect of mandatory arrest policies and crime rate, the relationship between arrest and race of the victim changes. Mandatory arrest policies are found to reduce the effect of race on arrest decisions, making this variable a non-significant predictor of arrest; however, crime rates increase the influence of race on arrest, with black victims less likely to have an arrest made in their cases relative to white victims (Eitle, 2005). Robinson and Chandek (2000a) and Berk and Loseke (1980-1) did not find race to be a significant predictor of arrest. While all of these authors tested these relationships using regression analyses, Robinson and Chandek (2000b) did discover through bivariate analyses that black women were significantly less likely than white women to have arrest used by police in their cases (26% vs. 36%). Eitle (2005) relied on data from a national databases (NIBRS and LEMAS), whereas Robinson and Chandek (2000a) utilized a sample of calls from one Midwestern police department, and Berk and Loseke (1980-1) relied on incident reports from a domestic violence unit in one California county.

Examining the influence of the sex of the involved parties, Berk and Loseke (1980-1) found that arrest was 21% less likely in cases where the female party called the police, although
this variable is capturing two concepts, the caller to emergency services and the sex of the party. Hamilton and Worthen (2011) found that male suspects were more likely to be arrested than female suspects in domestic incidents between heterosexual couples from cases statewide in Rhode Island. Considering the sex of the victim, Tatum and Pence (2015) found that arrest was more likely when there was at least one male victim, although this data was collected from forms completed by officers on the scene and victim sex was missing in about 40% of cases. Other research has not found the sex of the perpetrator to predict arrest decisions. Ho (2003) did not find significant prediction of arrest in domestic aggravated assault reports for male against female or female against male parties in one city. Incorporating both same and different sex partners (man assaulting woman, woman assaulting woman, woman assaulting man), Lally & DeMaris (2012) also did not find significant results, nor did Eitle (2005). The difference in measuring sex of the victim and the perpetrator, as well as constructing variables capturing the configuration of the sex and the role of victim/perpetrator may account for the differing results across these studies, as well the sampling, which varies from national data to that from single cities or counties. Age is less investigated; however, Eitle (2005) found that cases with younger victims are less likely to result in arrest.

Dichter et al. (2011) found that currently married partners were more likely to have an arrest made as compared to those that were dating or divorced (Dichter et al., 2011), whereas Lally and DeMaris (2012) found that arrest was less likely for couples in a romantic relationship relative to acquaintance or relative relationships. While both of these studies relied on national data, the categories used to define relationships are different. The main difference is that one study accounts for separation between parties (Dichter et al., 2011), whereas the other study only compares intimate to other types of relations (Lally & DeMaris, 2012).
Research on substance use by the victim and/or suspected offender has also resulted in mixed findings. In hypothetical vignettes, Feder (1997) found that police were more likely to recommend arrest in domestic violence situations that included a drunk offender compared to any of the other scenarios. Other studies have found drug and/or alcohol use by the offender to significantly predict arrest (Eitle, 2005; Berk and Loseke, 1980-1; Lally and DeMaris, 2012). Other authors, however, did not find alcohol to be significant (Robinson & Chandek, 2000a; Waaland & Keeley, 1985). Waaland and Keeley (1985) utilized a very small sample (36 officers) responding to questions about hypothetical case descriptions, with random inclusion of details about victim or perpetrator drinking. Characteristics related to the demographics of the victim and offender and the impact on arrest decisions is still unclear, which may in part be understood based on different definitions and categorizations used by researchers. As these can be the basis of bias, future research should continue to investigate the role these characteristics play and how they impact an officer’s decision-making.

2. **Situation characteristics**

The presence of a weapon is another factor that is important to consider and research demonstrates that it is linked to the officer decision to arrest. The presence or use of weapons has been found to be a significant predictor of arrest (Eigenberg, Scarborough, & Kappeler, 1996; Eitle, 2005; Dichter et al., 2011). Eigenberg, Scarborough, and Kappeler (1996) specifically looked at arrest in domestic violence versus non-domestic violence cases and found that weapon use was significant as a predictor of arrest only in domestic violence cases. Eitle (2005) also found the use of a weapon to significantly predict arrest in a model considering other situational variables.
Injury to the victim is another variable that has been found to predict arrest in IPV cases (Tatum & Pence, 2015; Eitle, 2005; Robinson and Chandek, 2000a; Waaland and Keeley, 1985). Past research has considered either the extent of an injury measured as none, minor, moderate or severe (Eigenberg, Scarborough, & Kappeler, 1996), whereas other authors have looked only at if an injury was reported or not (Eitle, 2005). Robinson and Chandek (2000a) found that the presence of an injury decreased the likelihood of arrest. Two studies did not find injury to predict arrest (Eigenberg, Scarborough, & Kappeler, 1996; Berk and Loseke, 1980-1). These studies relied on samples from specific police agencies (local and county level). The findings that did not support injury as a significant predictor of arrest may be due to a number of different factors. In the cases examined by Eigenberg, Scarborough, and Kappeler (1996), most frequently the injury was minor. While these injuries were not found to be a significant predictor, these authors did find that the use of a weapon was a significant predictor of arrest, which may be accounting for the effect of more serious injuries on arrest decisions. Additionally, this study also did not find injuries to be a significant predictor of arrest in non-domestic violence cases. Berk and Loseke (1980-1) used police reports as a data source. The authors noted that the officers more often made notes about injuries when they could see the injury, as compared to a victim reporting an injury. Despite the fact that more serious injuries were documented and collected, injury was not a significant predictor of arrest. It is important to consider the time of this study and that the reports were from 1978-79, which was right at the beginning of policy and funding shifts in this particular county aimed at improving police response to domestic violence.

Overwhelmingly, the presence of additional witnesses has been found to significantly impact whether a call results in arrest (Eigenberg, Scarborough, & Kappeler, 1996; Robinson &
Chandek, 2000a; Robinson & Chandek, 2000b; Buzawa & Austin, 1993). It is likely that a witness able to corroborate what occurred on the scene prior to police arrival may support an arrest decision by police.

Victim cooperation has also been considered in understanding arrest decisions and found to be a significant predictor (Buzawa & Austin, 1993; Eigenberg, Scarborough, & Kappeler, 1996; Berk & Loseke, 1980-1). Across these studies, the concept of victim preference is defined differently. Some authors, such as Berk and Loseke (1980-1), define victim preference as the willingness and/or intention by the victim to sign a complaint and found it to be the strongest significant predictor of arrest. Other studies (Buzawa & Austin, 1993; Eigenberg, Scarborough, and Kappeler, 1996) defined preference as how the victim wanted the police to resolve the encounter, such as talking it out or pursuing charges. Some authors equate willingness to sign a complaint with victim cooperation; however, when operationalized along with other factors of cooperation, it was not found to be a significant predictor of arrest (Robinson & Chandek, 2000a). While victim cooperation could be considered extralegal, in the case of willingness to sign a complaint, some officers express that they cannot make an arrest if they do not have a victim willing to sign a complaint (Fulambarker, 2014). Victim level of cooperation, as defined as demeanor toward the police, will be discussed below. Finally, many authors have found that the likelihood of arrest decreases if the offender has left the scene (Robinson & Chandek, 2000a; Feder, 1996; Hall, 2005; Hirschel & Buzawa, 2013). This availability of the suspected offender clearly predicts the ability to make an arrest in the moment; however, as Hirshel and Buzawa (2013) note, this could also demonstrate the unwillingness of officers to actively pursue suspects after they have left the scene.
B. **Organizational Factors**

Organizational or police agency variables have been considered in past research, as it is thought that agency culture, the makeup of police organizations, as well as policies internal to a police agency would influence an officer arrest decision. Dichter et al. (2011) included the type of police agency (which included county and municipal police agencies), the total budget of the organization, percent of officers that are female, and number of sworn officers per capita. In this study, arrest was more likely when the responding agency was municipal, had a lower budget and fewer officers, as well as a smaller percentage of female officers. In a full model considering agency, community and incident variables, these agency variables had very little impact on the decision to arrest, although were found to be significant. There was little guidance in the selection of these variables; the researchers cite authors who suggest the importance of including organizational factors in future research (Robinson & Chandek, 2000a). Looking at management influences within the organizational structure, Johnson and Dai (2016) considered the dependent variable of the proportion of domestic battery arrests to domestic violence calls and agency-level factors such as supervisor attitudes, characteristics, or factors such as the number of calls for service per officer; however, the authors did not find these variables to be significant. Future research should also consider department-wide training and other indicators that responding to intimate partner violence is a priority.

C. **External Factors**

Very little research has been pursued in considering the external or community-level factors that affect police action in IPV cases. Smith (1987) considered the economic status of the neighborhood and the overall victimization rates in the community based upon survey responses. This analysis found that the poverty level significantly influenced decision-making and that the
lower the economic status of the neighborhood, the lower the probability that officers will use mediation tactics and are more likely to use arrest. The sample for this study, however, included physical violence between citizens more broadly and was not specific only to IPV. One community-level factor that has been more commonly investigated, although perhaps not identified as such, is the purview of domestic violence arrest policies in different communities. Eitle (2005), Johnson and Dai (2016), and Johnson (2010) found that arrest policies were significantly related to arrests. Hirschel et al. (2007) also explored differences in arrest rates looking at arrest policies, but did not find a significant effect when looking at state arrest policies; they did find a significant relationship with arrest when using police department agency policies across all categories of relationships, with department policies encouraging arrest associated with the increased likelihood of arrest, which would be considered an organizational factor.

Dichter et al. (2011) included a wide variety of community level variables at the county level including population size, median age, percentage of the community that is foreign born, the proportion of the county that is defined as urban, median household income and percent below poverty line, percent of households with single parents, education level, unemployment rates, demographic makeup (sex and race), and the type of arrest policy. This study found that community-level variables, specifically differences in arrest policies, had the most significant impact in dual arrest cases (Dichter et al., 2011). Arrest was found to be more likely in those communities that were smaller, less urban, and had relatively more single-parent households. Additionally, arrest was more likely in the communities with a higher percentage of high school educated adults (Dichter et al., 2011). Pattavina, Buzawa, Hirschel, and Faggiani (2007) did not find differences in arrest outcomes between urban and rural communities. Clearly, community-
level variables have not been found to greatly influence arrest decisions; however, stronger theoretical foundations for community variable selection, as well as looking at an officer’s perception of the community may be worth exploring, as the latter has been found to be significant in child welfare research (Rivaux et al., 2008).

D. Decision-Maker Factors

It is important to also consider the police officer in understanding the arrest decision. Among the variables that have been previously considered are: officer demographic characteristics (age, sex, race, number of years on the job), attitudinal variables, and training. Officer sex has been found to be a significant predictor of arrest, with male officers making more arrests than female officers (Johnson & Dai, 2016) and female officers more likely to use supportive rather than coercive actions (Sun, 2007). Sun (2007) is unique in looking not only at arrest or no arrest, but also considering actions that are categorized as supportive and control tactics. In this study, officer sex was the only significant predictive variable. Other authors have not found sex to be significant (Feder, 1996; Stalans & Finn, 2000). Stalans and Finn (2000) did find that experienced female officers were more likely to refer a victim to shelter services than experienced male officers. Domestic violence training and its influence on arrest have also yielded mixed results. Johnson and Dai (2016) found logged domestic violence training to significantly predict the proportion of arrests to overall calls, as did Johnson (2010), though Feder (1996) did not. Officer experience has not been found to predict use of arrest by some (Philips & Sobol, 2010), but other research has found that experience influences the proportion of arrests made (Johnson & Dai, 2016).

Officer attitudes and beliefs have also been considered in the prediction of arrest. Officer beliefs about the role of women in the family and workplace have been found to predict arrest
(Feder, 1996). Additionally, officer attitudes that support police involvement in domestic violence were found to predict arrest (Feder, 1996; Robinson, 2000), as well as the belief that the department rewards response to IPV (Johnson & Dai, 2016).

1. **Officer Perceptions**

As noted above, police officer perceptions of the involved parties and what is occurring on the scene may prove to be influential in explaining their decisions. Suspect and victim demeanor have not been widely explored in the domestic violence literature; however, policing literature has found it to be a significant influence on a variety of police behaviors (Sherman, 1980). Demeanor has been measured differently by a number of researchers, but can be understood as the level of deference or respect that the suspect or victim displays toward the police (Sherman, 1980). Klinger (1994) notes that this definition is confined to “legally permissible behaviors,” and measures should not include criminal behaviors (p. 477). Within domestic violence research, Waaland and Keeley (1985) assessed the assailant’s behavior toward officers in hypothetical cases (measured by the levels of cooperative/respectful, somewhat belligerent, or extremely belligerent) and found officer decisions were significantly related to behavior; however, this variable made a relatively small impact on the decision. Robinson and Chandek (2000a) considered demeanor of the victim with a global measure of cooperation, which was considered independently of victim preference for arrest. The authors measured this variable by an officer rating of cooperative, neutral, or uncooperative, and did not find that demeanor measured by victim cooperation significantly impacted arrest. A number of authors (Kane, 1999; Perez-Trujillo & Ross, 2008) note that the variable was not considered in their analyses, implying that it might be important to explore further. An important caveat on measuring the demeanor of victims and offenders, as well as some measurements of victim
cooperation is that these measurements are based on officer perception of demeanor. When defined in this manner, future research can investigate if race or sex are related to how demeanor is perceived and then how this may influence police action.

Risk has been considered less frequently in research on understanding police response to IPV. Most of the research on risk, IPV, and police focuses on how officers may assess future risk (Wordes, 2000), rather than how this attribution of risk impacts decision-making. In particular, this research seeks to identify factors that increase risk of future violence and then to build instruments that guide police through their identification, with the end goal of improving safety for victims and assisting officers in responding in a systematic manner that reduces bias and discretion (Wordes, 2000). Re-assault is estimated to occur in 25-30% of reported cases (Campbell, 2005). In a study looking at risk of reoffending, Wordes (2000) found that having a prior domestic violence record as well as the couple having children are significantly related to a domestic violence re-offense. Additional research has investigated the risk factors for homicide in domestic violence cases and found that perpetrator access to guns and previous threats with a weapon were significantly associated with future femicide (Campbell et al., 2003). At the bivariate level, being a victim of stalking, forcible sex, or abuse while pregnant were associated with increased risk of homicide (Campbell et al., 2003). Similar to the research on risk of re-offense, these risk factors have been used in the creation of lethality risk assessment that can be used by police officers (Campbell, 2005).

While these are important contributions to understanding how we can predict future violence, few studies examine the perception of risk attributed to a situation by a police officer. Risk assessment is important in considering the likelihood of future re-assault, which could be a motivating factor for police action. Kane (1999) concluded that risk to the victim was the most
influential in the arrest decision and as the level of risk decreased, officers appeared to consider other factors in the arrest decision aside from risk. Kane (2000) found that victim injury and level of risk significantly predicted arrest, and in considering the violation of an order of protection, the odds of arrest increased when there was a violation of an order of protection even if the assessed risk was low. In both studies (Kane 2000; Kane, 1999), the level of risk was inferred and the presence of a threat of injury to the victim (categorized as no threat, fists/feet, knife, other weapon, or gun) was used as a proxy for risk and assigned by the author. Perez-Trujillo and Ross (2008) looked at what contributes to officer perception of risk and how this influences decision-making with officers in Victoria, Australia. This study considered both factors recorded by officers on standard risk assessment forms (which are used routinely in Victoria), as well as officer perception of risk and their perception of the likelihood of future violence on a 5-point scale. The authors found that victim level of fear, the progression of violence over time, previous domestic violence incidents, and substance use were significant predictors of the level of risk attributed by the officer (Perez-Trujillo & Ross, 2008). Officer risk management actions were measured as no action/referral, application for an intervention order (civil restraining order), and charges against the offender, based upon the intervention options available in Victoria, Australia. The perceived level of risk of future violence was found to be significant in the officer’s decision to take action (versus no action) and application for an intervention order (versus not), but not in the decision to charge (Perez-Trujillo & Ross, 2008). While the authors had information about actions that may lead to arrest (charges against offender), the data did not include information about whether a subsequent arrest was actually made.
As the research on risk perception and police decisions is scant in domestic violence cases, it is an important variable to consider further. Additionally, while the research that utilizes assessment tools by police may be useful, these tools are not widely used in police departments in the United States. While these tools may become more widely used, understanding officer perception of risk is important, as research in the child welfare system has demonstrated that assessment of risk may be biased despite the use of such a tool (Rivaux et al., 2008).

E. Gaps & Limitations

While there is an established body of literature that explores police decision-making in domestic violence, this research is limited by its theoretical grounding, particularly in building a comprehensive model that includes a range of variables that have the potential to influence decision-making. Additionally, the narrow focus of past research simply on arrest versus no arrest overlooks the complexity and multiple decision points that comprise officer discretion (Morabito, 2007). Further, there is a relative absence of the consideration of officer perception of risk in understanding how officers make decisions. It is important, then, to further assess the variables that influence police actions in order to more accurately depict the reality of police discretion in cases of domestic violence. Methods used to understand police action have widely relied on police records and hypothetical vignettes; while these are useful tools, the use of officer recollection of actual domestic violence calls may allow for a more realistic sampling of calls, as opposed to vignettes, which may include only a select few manipulated variables. Through the use of a strong theoretical model that is used to understand decision-making in the child welfare system and including an assessment of risk, this research contributes to the existing body of literature and expands our understanding not only of the decisions police make in domestic violence cases, but also how they make these decisions.
IV. METHODOLOGY

A. Research Question

The main research question guiding this study was: how do the elements of the Decision-Making Ecology influence police action in cases of domestic violence? More specifically, this study examined how case factors, organizational factors, external factors, and decision-maker factors influence the outcome variable of police action defined as arrest, informal action, and no action in cases of domestic violence (see Figure 3). Officer perception of risk, as one assessment within the DME, was examined to assess if this variable mediates the influence of other DME elements on police action (Figure 4). The specific hypotheses are listed below. It should be noted that these hypotheses were later adjusted based upon initial analyses and problems with missing data (see Results chapter).

H1: Case factors will influence officer decisions, specifically:

a. Report of an injury by the victim

b. The use of a weapon by the offender

H2: Officer case-related assessments (perception of risk, perception of demeanor, perception of effectiveness of arrest) will influence an officer’s decision to arrest

H3: The relationship between case factors and officer decision will be mediated by an officer’s perception of risk in the case. Specifically, officer perception of risk will mediate the relationship between the factors of a violation of an order of protection, victim/perpetrator under the influence of drugs/alcohol, repeat call, and/or victim/perpetrator race and officer decision.
Figure 3. Variables of Interest Within the Decision Making Ecology Framework

**Case Factors**
- Victim age/race/sex
- Victim injury reported
- Victim willing to sign a complaint
- Victim signs a complaint
- Victim use of drugs/alcohol
- Offender age/race/sex
- Offender injury reported
- Offender use of a weapon
- Offender on scene
- Offender use of drugs/alcohol
- Violation of an order of protection
- Repeat call
- Victim/Offender relationship
- Witnesses present
- Children present
- Caller

**Organizational Factors**
- Domestic violence policies
- Proportion of female officers
- Officers per capita

**External Factors**
- % below poverty level
- Indicators of social disorganization

**Decision Maker Factors**
- Officer age/race/sex
- Years on the job
- Domestic violence training
- Officer perception of victim/offender demeanor
- Officer perception of future risk

**Decision Making**
- Arrest
- Informal Action
- No Action
Figure 4. Hypothesized Mediating Relationship

Decision Maker Factor  
Officer perception of future risk

Case Factors  
Victim age/race/sex  
Victim use of drugs/alcohol  
Offender age/race/sex  
Offender use of drugs/alcohol  
Violation of an order of protection  
Repeat call

Decision Making  
Arrest  
Informal Action  
No Action

B. Research Methodology

This study utilized a cross-sectional, correlational design that employed self-administered surveys of police officers from multiple police departments in the Chicago suburbs attending ongoing training classes offered through the North East Multi-Regional Training Center (NEMRT). NEMRT provides in-service training to law enforcement in the Chicago metropolitan area. In FY2013, NEMRT provided training to 14,618 police personnel from within the 320 member departments, with trainings offered throughout seven counties in the Chicagoland area. These courses range in content and are open to officers of all ranks and assignments.
B. **Sampling Plan**

A convenience sample of officers from 18 purposively selected training courses was utilized. Courses were selected to maximize variation of course topics, as well as targeting larger courses to reach a greater number of officers. The purposive selection of courses was designed to include the most diverse cross-section of police officers possible from a broad range of training course topics. Some of the sampled courses include: Testifying at a DUI Trial, Explosive Recognition, Writing Effective Search Warrants, and Juvenile Interrogation & Delinquency Update. No courses with content related to domestic violence were selected.

Data were collected through self-administered, paper-and-pencil surveys distributed at the selected NEMRT courses. Study eligibility was limited to sworn and active officers who were enrolled in selected training courses. The recruitment script and Study Information Sheet (see Appendix A and Appendix B) reflected these eligibility requirements, as training courses could include civilian police personnel who do not meet these requirements. The recruitment script also emphasized the purpose of the research and the goal of the research to understand the complexity of decision-making in domestic violence calls. Additionally, the script noted that participation was not required and was in no way connected to participants’ enrollment and success in the course. Finally, the script provided instructions for those that did not wish to participate to leave their survey blank. The researcher was allotted time at the beginning of each selected training course. After reading the recruitment script, the questionnaire was distributed to course participants. Completion time of the questionnaire averaged about 20-25 minutes, and upon completion, all questionnaire packets were collected. In appreciation for participation and the time of the course instructor and course participants, snacks were provided.
C. Measurement and Instrumentation

A questionnaire was used to collect the information about a recent call to which an officer responded. This questionnaire included items pertaining to the details of the call and the outcome, as well as information about the officer/respondent and his/her police department. The advantage to using a questionnaire over case records is that a questionnaire allows for the collection of data not typically included in case records, such as officer demographic information and the officer’s perception of risk. The questionnaire prompted officers to answer the questions about the most recent domestic violence call to which they responded:

This survey is to collect information about a recent domestic call involving intimate partners to which you responded. Please think of the most recent domestic call that you responded to.

An eligible call involves individuals in an intimate relationship, including current or former partners, married or dating.

Please think about this most recent call and answer the following questions based upon the subjects and circumstances involved in this call.

The items included in the questionnaire correspond to the elements of the Decision-Making Ecology, as well as an item assessing the perceived future risk of violence.

1. Dependent Variable

The dependent variable of interest in this study was the nominal variable police officer action, which was measured as no action, informal action, or arrest. The questionnaire asked officers to report on how they resolved the most recent domestic violence call to which they responded:

This call may have been resolved in any of the following ways:
-Arrest: taking a subject into custody in response to any criminal offense.

-No action: no response was required or warranted. This may include cases where you were unable to provide further assistance based upon the circumstances or action was not warranted or relevant.
Informal action: steps taken to assist a victim or separate parties informally. This may include, but is not limited to: completing a police report, transporting a victim to the hospital or shelter, informing victims about obtaining an order of protection, or asking the suspected perpetrator to leave the scene.

Participants were asked to check all resolution options utilized. For the analysis, multiply selected response options were hierarchically coded as the most formal response. For instance, a call resulting in both arrest and the use of informal options was coded as “arrest.”

2. **Case Factors**

Case factors are those factors related to the general facts of the call and information about the involved parties. General information about the call included the relationship between the parties (nominal) and was measured as married, dating, or separated; if there were witnesses present on the scene (nominal, dichotomous); and if an order of protection was violated (nominal, dichotomous). The officer was asked to report if they were able to identify a primary aggressor in the case (nominal, dichotomous). Two subsequent sections collected information about the victim, offender, or each involved party (in cases where a primary aggressor could not be identified). Preliminary analysis found significant differences in the outcomes for calls where a primary aggressor was identified versus not. As such, only cases where a primary aggressor was identified were included in subsequent analyses (see Results chapter for further discussion).

Demographic information was collected including the race of victim (nominal), victim age (ratio), and sex (nominal). Additionally, a question regarding injuries asked if the victim reported an injury (nominal, dichotomous). While other authors have considered the extent of an injury (Eigenberg, Scarborough, & Kappeler, 1996), this study asked respondents only if the victim reported an injury. As Eigenberg, Scarborough, and Kappeler (1996) note, extent of the
seriousness of an injury has not been well operationalized in research, nor is the understanding of the meaning that police officers attribute to different types of injuries (Eigenberg, Scarborough, & Kappeler, 1996, p. 47). Another variable of interest was if the victim was under the influence of drugs or alcohol at the time of the call (nominal, dichotomous). Finally, the willingness of the victim to sign a complaint and if the victim did sign a complaint was collected (nominal, dichotomous). Similar information about the offender was also collected, including race (nominal), age (ratio), sex (nominal), and being under the influence of drugs or alcohol (nominal, dichotomous). Additionally, the officer was asked if the offender used a weapon (nominal, dichotomous) and if the offender was present when police arrived (nominal, dichotomous).

3. Organizational Factors

The questionnaire asked officers an open-ended question to indicate the police department at which they are employed. From the department name, it was planned that the number of officers per capita (ratio) and the proportion of female officers in the department (ratio) could be ascertained. However, there was a high rate of missing data for this question. Consequently, this information could not be used for this analysis (refer to the Results chapter for further discussion).

Additionally, two questions assessed an officer’s perception of the supervisor prioritization of domestic violence response. These questions were replicated from the work of Johnson (2010) and asked an officer’s agreement with the following statements (on a four point scale ranging from strongly disagree to strongly agree): “My chief thinks that domestic violence enforcement is a department priority” and “My immediate supervisor thinks that domestic violence enforcement is a department priority” (p.537). Johnson (2010) used a composite score that combined these measures, with higher scores indicating a higher domestic violence priority.
The alpha score for the composite measure was .841, indicating similarity in concept between these items (Johnson, 2010, p. 537).

4. **Community Factors**

The community-level factors of poverty rate was to be gathered on the questionnaire using the zip code of the location of the call provided by the respondent in an open-ended question. There was also a high percentage of missing data for this question, and therefore, community level factors were not included in the analysis. While the potential for problems with missing data for zip code and police department was anticipated, it was hoped that not collecting any individual level identifying information would mitigate this issue; however, this was not the case. For further discussion, see the Results chapter.

5. **Decision-Maker Factors**

Finally, decision-maker variables were collected through a demographic section of the survey. Officer tenure, or the number of years an officer has on the job (ratio), as well as officer rank (nominal), race (nominal), sex (nominal), and age (ratio) were collected. Finally, whether an officer had advanced domestic violence training beyond the police academy was measured (nominal, dichotomous). Officer perception of risk of future violence in the case was measured by using questions that asked officers to rate their perception of the level of risk. As Finn et al. (2004) notes, most research that assesses risk considers police records that use a proxy measure of risk such as weapons or injury; however, in this survey direct perception was measured. One question was adapted from a study conducted by Perez-Trujillo and Ross (2008) and asked officers to estimate the likelihood of future violence on a 5-point scale (very unlikely, unlikely, possible, likely, almost certain). Additionally, the questionnaire asked the likelihood of future calls to the home and the likelihood of future harm to the victim by the offender on the
same 5-point scale. Officers were also asked about their perception of the effectiveness of resolutions, and while this variable was hypothesized to influence decision-making, ultimately this variable was not used for analysis. Post-data collection it was discovered that the way the question was worded would not allow for the variable to be used as a predictor (the question asked about the effectiveness of the resolution they used rather than general perceptions about the effectiveness of response options). While it could not be used in this analysis, future work will examine officer perceptions of effectiveness of their response options. The final officer perception collected was victim and offender demeanor, assessed independently of victim preference or cooperation. Demeanor was measured utilizing a scale used by Morabito et al. (2010) in a study looking at police use of force with persons with mental illness. Officers rated the four statements (“1 - The subject displayed combative/assaultive behavior; 2 - The subject was verbally abusive; 3 - The subject was upset/angry/agitated; 4 - The subject had a calm demeanor”) with their level of agreement (“1 – not at all; 2 – very little; 3 – somewhat; 4 – to a great extent”) (p. 11). Morabito et al. (2010) reverse scored statement 4 and then all scores were averaged for a demeanor scale with a higher score indicating a more resistant demeanor. Finally, an open-ended question allowed officers to provide their opinion on what options they believe might be effective in reducing risk and the options they wish they had to resolve the situation. The results of this question will be incorporated in future analysis.

D. Pilot Testing

An initial pilot phase with two training courses was utilized to test the survey instrument. The draft questionnaire was distributed to officers and they were asked to make notations throughout the questionnaire and provide comments regarding any components that were unclear or used inappropriate or inaccurate word choices. The pilot training courses consisted of 83
course participants, from which 73 completed questionnaires were obtained. The data from these questionnaires were not included in any further analysis as the data were coded differently and significant changes were made to sections of the questionnaire based on officer feedback. The most significant change was to allow options for the officer to indicate if he or she was able to identify a primary aggressor, as described above, and editing existing questions to reflect this option (including not applicable or unable to identify a primary aggressor option). This resulted in a final questionnaire (see Appendix C) that included two similar sections for answering questions about each party and asked the officer to indicate which party (victim, offender, or one involved party) they answered the question about.

E. Data Analysis

Data collected from the surveys were analyzed using Stata version 14.1 (Stata Corp, 2015). Univariate analyses were conducted as both a method to screen the data and to describe the sample. Descriptive statistics (mean, median, mode, minimum/maximum values, frequencies) for each variable were used to detect out of range values and missing data for data screening purposes (Tabachnick & Fidell, 2007). As a self-administered questionnaire may be sensitive to missing data, the data were analyzed to detect if there was any pattern (Tabachnick & Fidell, 2007). Cases with missing and non-missing values were compared for any significant mean differences between groups (Tabachnick & Fidell, 2007). Bivariate analysis included screening for multicollinearity between independent predictors in the model, as models using logistic regression are sensitive to high correlation between predictors (Tabachnick & Fidell, 2007). The main research question was explored using a path model, which was informed by running preliminary logistic regressions to identify the variables to include in the path model. A preliminary main-effects model was fit first by considering independent variables that have
theoretical relevance. Additional covariates found to be associated with the outcome at the $p < .25$ level were also considered for inclusion in the model. This strategy is recommended because using a large number of covariates has a high potential of leading to instability in the model; therefore, all the covariates were not entered into one model (Hosmer, Lemeshow, & Sturdivant, 2013). The overall model fit and specification were also analyzed. The variables identified in the preliminary regression models were then entered into a path model to test both the direct effects and the mediating relationship of officer perception of risk.

F. **Protection of Human Subjects**

This study was considered to be of minimal risk to participants as the study focused on the employment responsibilities of police officer participants. The questionnaire did not ask about participant personal experiences with domestic violence and solely focused on calls for assistance to which officers responded. While minimal risk and minimal emotional discomfort are anticipated due to the subject matter, the sensitive nature of domestic violence generally is acknowledged and officers were informed that they can stop responding to the questionnaire or skip any questions at any time if the subject matter became sensitive or upsetting.

In order to avoid undue influence or coercion, the recruitment script reflected that participation in this study is completely voluntary. Additionally, the script stated that agreeing or declining participation would not impact their course completion or employment at their individual police departments. This information was also included in the Study Information Sheet provided to all participants.

Procedures for this study were designed to minimize the risk of breaches of privacy and confidentiality. No individually identifiable information was collected in the questionnaire and a waiver of documentation of consent was granted by the Institutional Review Board (IRB) as the
consent document would be the only record linking the identifying information about the participant to the research and their questionnaire responses. All participants in the selected courses were provided with a questionnaire and those who chose to not participate in the study were instructed to return a blank questionnaire, preventing their participation being revealed to others and the researcher. A study ID was assigned to each survey once completed and used as the sole identifier of individual records when creating the electronic dataset. Data were stored on a password protected and encrypted file on a password protected computer.
V. RESULTS

A. Data Collection & Screening

Data were collected through 18 purposively selected training classes from April through June of 2015. A total of 432 questionnaires were distributed at these training classes and 318 questionnaires were returned completed, a response rate of 73.6%. Procedures for screening and cleaning data (Tabachnick & Fidell, 2007) were followed. Univariate descriptive statistics were used to screen the accuracy of input, missing values, and any outliers. A summary of the data collection and screening is depicted in Figure 5.

1. Accuracy

This process revealed a number of out of range values, indicating errors in input. As a result, all surveys were double checked against the data file for accuracy and any errors corrected. Further, of the 318 completed questionnaires, 15 questionnaires were determined to have invalid data. Invalid data included answering the questions about ineligible calls (3 cases that upon examining the narrative description were found to be about gang-related violence or other situations with non-related/domestic parties), large amounts of missing demographics about the victim and offender (5 cases), not recent calls (2 cases), and false information (1 case where multiple boxes were checked for almost all questions). Additionally, 6 questionnaires were answered inconsistently, such as writing in the narrative that the call was to a husband and a wife and then identifying both the victim and offender as female. In these cases a clear determination of the identity of the victim or offender could not be made and the data were
excluded. This process resulted in a sample including 303 valid, completed questionnaires.

2. **Outliers**

   In assessing for any outliers, plausible means and predictable distributions were looked at, as many of the variables in this analysis are categorical and dichotomous. As recommended by Tabachnick and Fidell (2007), the dichotomous variables that had a greater than 90%-10% split between values should not be included in the analysis. These variables included: victim using a weapon (only used in 3.6% of cases) and the violation of an order of protection (in 95.2% of cases, the officer indicated no order of protection was violated). The proportion of calls violating an order of protection is lower than in another study examining orders of protection. Kane (1999) found that 16% of calls to Boston Police in 1993 violated a restraining order, as compared to less than 5% in this study.

   Initial screening found that for the dependent variable of call resolution (arrest, informal action, no action) only 3% of officers identified a case in which no further action was taken. Since there are too few cases resolved by no action for regression analysis, no action and informal action were collapsed into one category: “no arrest.”

3. **Missing data**

   The guideline for the amount of missing data that should be examined more closely is those variables missing more than 5% of values (Tabachnick & Fidell, 2007). Univariate analysis revealed problematic levels of missing data for the police department for which an officer works (24.5% missing) and zip code (9.24% missing).

   As values for these variables cannot be logically imputed, they were eliminated from the analysis. The variables that therefore could not be included in the analysis include the officers per capita and the proportion of female officers (from police department name), and poverty
rates and other indicators of social disorganization (from zip code). It should also be noted that those participants that did provide their police department were employed at a large number of different departments, with the sample including no more than a few officers from any single department. This data are nested; however, nested analysis could not be performed with so few cases in each cell, another reason that these variables could not be included in the analysis.

4. **Multivariate Analysis for Outliers**

Initial univariate analysis demonstrated that in 249 of the 303 cases (80.5%), a primary aggressor was identified and in 54 (17.8%) of the reported cases there was not a primary aggressor identified. In order to determine if there is a significant difference in arrest decisions for cases where a primary aggressor was identified versus not, bivariate analyses were performed on these variables. The analysis revealed that the proportion of arrests in cases where a primary aggressor was not identified was very small (3.7%). For those cases where a primary aggressor was identified, the variance in arrest decision was distributed more evenly between arrest and not arrest (44.3% and 55.7%, respectively). This difference in arrest outcomes between these two groups was significant ($\chi^2 = 48.15, df = 1, p < .001$) and therefore those cases in which a primary aggressor was not identified were eliminated from these analyses.

The questionnaire intended to collect information about domestic violence calls between intimate partners. However, 15 police officers provided information about calls with individuals who were identified as non-intimate partner family members. Bivariate analysis was done to see if there was a significant difference for family members and intimate partners on the dependent variable of call resolution. This analysis revealed that there was not a significant difference ($\chi^2 = 6.31, df = 3, p = .10$) and these cases were included in the analysis.
Figure 5. Data Collection and Screening

18 courses purposively sampled
   April – June 2015

432 questionnaires distributed

318 questionnaires completed
   74% of distributed questionnaires

15 questionnaires excluded for invalid data

303 valid questionnaires
   70% of distributed questionnaires

249 cases where a primary aggressor was identified
   82% of valid, completed questionnaires
   58% of all distributed questionnaires

B. Sample

A total of 249 questionnaires are included in this analysis, which is 82% of the valid, completed questionnaires, 58% of all distributed questionnaires. Table I lists the demographic description of the sample of police officers. The officers that completed these questionnaires were mostly white and male. About half of the sample had a rank of police officer, and 21.5% were officers assigned to detective units and 16.7% were police officers assigned as field training officers. Only 5.3% were supervisors (Sergeants or Lieutenants). For the participants that disclosed the police agency for which they work, there were 110 different police departments in the metropolitan Chicago area represented in this sample. About half of the officers reported completing domestic violence training in the last 5 years (51.0%).
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<td><strong>Sex</strong></td>
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<tr>
<td>Female</td>
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<tr>
<td>Other</td>
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<td>30-39</td>
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</tr>
<tr>
<td>more than 21 years</td>
<td>17</td>
<td>6.8%</td>
</tr>
<tr>
<td><strong>Rank</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police Officer</td>
<td>134</td>
<td>53.8%</td>
</tr>
<tr>
<td>PO - Assigned Detective</td>
<td>53</td>
<td>21.3%</td>
</tr>
<tr>
<td>PO - Field Training Officer</td>
<td>41</td>
<td>16.5%</td>
</tr>
<tr>
<td>Sergeant</td>
<td>10</td>
<td>4.0%</td>
</tr>
<tr>
<td>Lieutenant</td>
<td>3</td>
<td>1.2%</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>2.0%</td>
</tr>
<tr>
<td><strong>Domestic Violence Training</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>118</td>
<td>47.4%</td>
</tr>
<tr>
<td>Yes</td>
<td>127</td>
<td>51.0%</td>
</tr>
</tbody>
</table>
C. **Univariate Statistics**

1. **Dependent Variable**

   The sample includes 111 (45.0%) cases in which no arrest was made; rather, the officer took some form of less formal action or took no action. In the remaining 138 (55.0%) cases an arrest was made. As participants were asked to check all resolution options they utilized, the most formal response option was coded as the resolution of the call. For example, if an officer provided a victim with domestic violence resources and also arrested the offender, then the resolution was coded as arrest. For the remaining calls where no arrest was made, less formal response options were reported such as completing a police report, transporting the victim to the hospital or shelter, providing domestic violence resources, or asking the victim or offender to leave the scene, or taking no action. Below in Table II, the informal response options used by officers in both cases where arrests and no arrest was made. These response options are not mutually exclusive and officers were able to select all resolution options utilized.

<table>
<thead>
<tr>
<th></th>
<th>No Arrest</th>
<th>No Arrest (%)</th>
<th>Arrest</th>
<th>Arrest (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Police report completed</td>
<td>85</td>
<td>76.6%</td>
<td>62</td>
<td>44.9%</td>
</tr>
<tr>
<td>Victim transported to the hospital</td>
<td>5</td>
<td>4.5%</td>
<td>16</td>
<td>11.6%</td>
</tr>
<tr>
<td>Victim transported to a shelter</td>
<td>2</td>
<td>1.8%</td>
<td>1</td>
<td>0.7%</td>
</tr>
<tr>
<td>Provide information about orders of protection</td>
<td>45</td>
<td>40.5%</td>
<td>54</td>
<td>39.1%</td>
</tr>
<tr>
<td>Provide victim with domestic violence resources</td>
<td>53</td>
<td>47.8%</td>
<td>55</td>
<td>39.9%</td>
</tr>
<tr>
<td>Perpetrator asked to leave scene</td>
<td>42</td>
<td>37.8%</td>
<td>4</td>
<td>2.9%</td>
</tr>
<tr>
<td>Victim asked to leave the scene</td>
<td>18</td>
<td>16.2%</td>
<td>2</td>
<td>1.5%</td>
</tr>
<tr>
<td>No action taken</td>
<td>8</td>
<td>7.2%</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>
2. **Independent Variables**

   a. **Case characteristics**

   Half of the cases identified by participants were dispatched as domestic disturbances (50.2%), followed by domestic battery (28.9%) and general disturbances (9.6%). The callers for emergency services in these cases consisted of victims (48.2%), other related parties including the offender, children, or other family members (18.9%), and neighbors (14.9%). Table III summarizes the relationship and other characteristics of the case.
<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>n(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship of involved parties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>93</td>
<td>37.4%</td>
</tr>
<tr>
<td>Dating</td>
<td>110</td>
<td>44.2%</td>
</tr>
<tr>
<td>Separated/Divorced/No longer dating</td>
<td>30</td>
<td>12.1%</td>
</tr>
<tr>
<td>Family/Other</td>
<td>15</td>
<td>6.0%</td>
</tr>
<tr>
<td>Caller to Emergency Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victim</td>
<td>120</td>
<td>48.2%</td>
</tr>
<tr>
<td>Other Related Party</td>
<td>47</td>
<td>18.9%</td>
</tr>
<tr>
<td>Neighbor</td>
<td>37</td>
<td>14.9%</td>
</tr>
<tr>
<td>Other</td>
<td>33</td>
<td>13.3%</td>
</tr>
<tr>
<td>Unknown</td>
<td>12</td>
<td>4.8%</td>
</tr>
<tr>
<td>Children on scene</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>124</td>
<td>49.8%</td>
</tr>
<tr>
<td>No</td>
<td>125</td>
<td>50.2%</td>
</tr>
<tr>
<td>Witnesses on scene</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>88</td>
<td>35.3%</td>
</tr>
<tr>
<td>No</td>
<td>159</td>
<td>63.9%</td>
</tr>
<tr>
<td>Repeat call</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>97</td>
<td>39.0%</td>
</tr>
<tr>
<td>No</td>
<td>126</td>
<td>50.6%</td>
</tr>
<tr>
<td>Unknown</td>
<td>26</td>
<td>10.4%</td>
</tr>
</tbody>
</table>
b. **Victim characteristics**

Officers were asked to report the characteristics of the person they identified as the victim, which are summarized in Table IV. Most of the victims (75.1%) were women. Just under half of the victims (46.6%) were white, and 24.5% were African American/Black and 27.3% Hispanic/Latino. About half of the victims reported an injury (48.6%) and slightly more than a third (35.6%) signed a complaint against the suspected offender.

c. **Offender characteristics**

The demographic characteristics of the party identified by the police officer as the suspected offender are summarized in Table IV. Most of the offenders were male (73.0%) and about 45% were white, followed by similar proportions of African American/Black (28.5%) and Hispanic/Latino (25.7%) individuals, mirroring the racial breakdown of victims.
<table>
<thead>
<tr>
<th></th>
<th>Victim (n = 249)</th>
<th>Offender (n = 249)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>n (%)</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>60</td>
<td>24.1%</td>
</tr>
<tr>
<td>Female</td>
<td>187</td>
<td>75.1%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian/White</td>
<td>116</td>
<td>46.6%</td>
</tr>
<tr>
<td>African American/Black</td>
<td>61</td>
<td>24.5%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>68</td>
<td>27.3%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>1.6%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 19</td>
<td>12</td>
<td>4.9%</td>
</tr>
<tr>
<td>20-29</td>
<td>76</td>
<td>31.2%</td>
</tr>
<tr>
<td>30-39</td>
<td>79</td>
<td>32.4%</td>
</tr>
<tr>
<td>40-49</td>
<td>57</td>
<td>23.4%</td>
</tr>
<tr>
<td>50 and over</td>
<td>20</td>
<td>8.2%</td>
</tr>
<tr>
<td><strong>Drug or alcohol use</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>65</td>
<td>26.1%</td>
</tr>
<tr>
<td>No</td>
<td>158</td>
<td>63.5%</td>
</tr>
<tr>
<td>Unknown</td>
<td>26</td>
<td>10.4%</td>
</tr>
<tr>
<td><strong>Used a weapon</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>3.6%</td>
</tr>
<tr>
<td>No</td>
<td>240</td>
<td>96.4%</td>
</tr>
<tr>
<td><strong>Reported an injury</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>121</td>
<td>48.6%</td>
</tr>
<tr>
<td>No</td>
<td>128</td>
<td>51.4%</td>
</tr>
<tr>
<td><strong>Willing to sign a complaint</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>103</td>
<td>41.4%</td>
</tr>
<tr>
<td>No</td>
<td>143</td>
<td>57.4%</td>
</tr>
<tr>
<td><strong>Signed a complaint</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>88</td>
<td>35.6%</td>
</tr>
<tr>
<td>No</td>
<td>159</td>
<td>64.4%</td>
</tr>
</tbody>
</table>
d. **Officer perceptions**

Officers also provided their assessment of victim and offender demeanor, measured based on four questions, one of which was reverse coded, and scores were then summed and averaged (Morabito et al., 2010). Higher scores indicate a more resistant demeanor. Table V summarizes the demeanor scores given to both victims and offenders by participants.

<table>
<thead>
<tr>
<th></th>
<th>Victim</th>
<th></th>
<th></th>
<th>Offender</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
<td>SD</td>
<td>n</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>This person displayed combative behavior</td>
<td>247</td>
<td>1.73</td>
<td>0.86</td>
<td>245</td>
<td>2.67</td>
<td>1.04</td>
</tr>
<tr>
<td>This person was verbally abusive</td>
<td>247</td>
<td>1.74</td>
<td>0.90</td>
<td>245</td>
<td>2.68</td>
<td>1.10</td>
</tr>
<tr>
<td>This person was upset/angry/agitated</td>
<td>247</td>
<td>2.89</td>
<td>0.86</td>
<td>245</td>
<td>3.13</td>
<td>0.86</td>
</tr>
<tr>
<td>This person had a calm demeanor (reversed)</td>
<td>247</td>
<td>2.54</td>
<td>0.90</td>
<td>245</td>
<td>2.90</td>
<td>1.01</td>
</tr>
<tr>
<td>Average demeanor score</td>
<td>247</td>
<td>2.23</td>
<td>0.70</td>
<td>245</td>
<td>2.84</td>
<td>0.88</td>
</tr>
</tbody>
</table>

These scores indicate that officers reported offenders to have a more resistant demeanor. A paired t-test found a significant difference in means between officer perception of victim and offender demeanor ($t(242)= -8.94$, $p < .001$).

In addition to demeanor, officer assessments of the likelihood of future harm to the victim by the offender, the likelihood of future violence for the couple, and the likelihood of a future call to the police for domestic violence were also collected. Higher scores on these scales indicate a greater likelihood of the event occurring (1 - very unlikely, 5 - almost certain). Table VI summarizes these assessments.
TABLE VI

Assessments of Future Risk by Police Officers

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likelihood of future violence for couple</td>
<td>246</td>
<td>3.68</td>
<td>1.05</td>
</tr>
<tr>
<td>Likelihood of future harm to victim by offender</td>
<td>246</td>
<td>3.24</td>
<td>1.02</td>
</tr>
<tr>
<td>Likelihood police will be called in the future</td>
<td>246</td>
<td>3.64</td>
<td>1.07</td>
</tr>
</tbody>
</table>

D. Bivariate Statistics

Chi-square tests were performed with the dependent variable (resolution decision to arrest or not arrest) and all categorical independent variables to select those to be included in the preliminary regression models, which were then used to determine variables to include in the final path model. While all variables may be relevant to the outcome, the inclusion of a large number of predictors may cause instability (Tabachnick & Fidell, 2007). Therefore, bivariate analyses were conducted to determine those variables that are associated with the dependent variable at a relaxed significance level of $p < .25$ (Stoltzfus, 2011). Table VII includes the results of the chi-square tests and the significant results are discussed below. The relationship between interval level variables and the dependent variable were assessed using simple logistic regression, and the results are reported in Table VIII.
### TABLE VII

*Chi-Square Analyses of Independent Variables on Dependent Variable*

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>n</th>
<th>X^2</th>
<th>df</th>
<th>Cramer's V</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Victim Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>247</td>
<td>0.26</td>
<td>1</td>
<td>-0.03</td>
</tr>
<tr>
<td>Race (white/all other)</td>
<td>249</td>
<td>0.006</td>
<td>1</td>
<td>0.005</td>
</tr>
<tr>
<td>Age</td>
<td>244</td>
<td>4.35</td>
<td>4</td>
<td>0.13</td>
</tr>
<tr>
<td>Under influence of drugs/alcohol</td>
<td>249</td>
<td>4.46+</td>
<td>2</td>
<td>0.13</td>
</tr>
<tr>
<td>Injury reported</td>
<td>249</td>
<td>84.05***</td>
<td>1</td>
<td>0.58</td>
</tr>
<tr>
<td>Willing to sign complaint</td>
<td>246</td>
<td>65.17***</td>
<td>1</td>
<td>0.51</td>
</tr>
<tr>
<td>Signed a complaint</td>
<td>247</td>
<td>85.14***</td>
<td>1</td>
<td>0.59</td>
</tr>
<tr>
<td><strong>Offender Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>248</td>
<td>0.51</td>
<td>1</td>
<td>-0.05</td>
</tr>
<tr>
<td>Race (white/all other)</td>
<td>249</td>
<td>0.27</td>
<td>1</td>
<td>-0.03</td>
</tr>
<tr>
<td>Age</td>
<td>244</td>
<td>3.83</td>
<td>4</td>
<td>0.13</td>
</tr>
<tr>
<td>Under influence of drugs/alcohol (yes/no)</td>
<td>249</td>
<td>19.02***</td>
<td>2</td>
<td>0.28</td>
</tr>
<tr>
<td>Injury reported</td>
<td>249</td>
<td>21.37***</td>
<td>1</td>
<td>0.29</td>
</tr>
<tr>
<td>Use of a weapon</td>
<td>249</td>
<td>11.58***</td>
<td>1</td>
<td>0.22</td>
</tr>
<tr>
<td>Offender on scene</td>
<td>249</td>
<td>0.009</td>
<td>1</td>
<td>-0.006</td>
</tr>
<tr>
<td><strong>Situation Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td>248</td>
<td>6.31+</td>
<td>3</td>
<td>0.16</td>
</tr>
<tr>
<td>Witnesses present</td>
<td>247</td>
<td>0.003</td>
<td>1</td>
<td>0.003</td>
</tr>
<tr>
<td>Children present</td>
<td>249</td>
<td>0.34</td>
<td>1</td>
<td>0.04</td>
</tr>
<tr>
<td>Caller</td>
<td>249</td>
<td>7.61+</td>
<td>4</td>
<td>0.17</td>
</tr>
<tr>
<td>Repeat call (yes/no)</td>
<td>223</td>
<td>1.4+</td>
<td>1</td>
<td>0.08</td>
</tr>
<tr>
<td><strong>Officer Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>244</td>
<td>0.01</td>
<td>1</td>
<td>-0.01</td>
</tr>
<tr>
<td>Race (white/all other)</td>
<td>244</td>
<td>0.23</td>
<td>1</td>
<td>-0.03</td>
</tr>
<tr>
<td>Age</td>
<td>240</td>
<td>0.02</td>
<td>3</td>
<td>0.01</td>
</tr>
<tr>
<td>Years on Job</td>
<td>246</td>
<td>4.90</td>
<td>5</td>
<td>0.14</td>
</tr>
<tr>
<td>DV Training</td>
<td>245</td>
<td>0.81</td>
<td>1</td>
<td>-0.06</td>
</tr>
<tr>
<td>Rank</td>
<td>245</td>
<td>2.8+</td>
<td>2</td>
<td>0.11</td>
</tr>
</tbody>
</table>

***p<.001, **p<.01, *p<.05, +p<.25
1. **Victim characteristics**

Characteristics related to the victim that are significantly associated with the decision to make an arrest include a report of an injury ($\chi^2 = 84.05$, $df = 1$, $p < .001$), being willing to sign a complaint ($\chi^2 = 65.17$, $df = 1$, $p < .001$), and actually signing a complaint ($\chi^2 = 85.14$, $df = 1$, $p < .001$). An officer was significantly more likely to make an arrest in cases where a victim reported an injury, as well as those situations in which a victim expressed interest in signing a complaint and/or actually signed a complaint. Within the less stringent range of significance, an association between arrest and the victim being under the influence of drugs or alcohol exists ($\chi^2 = 4.46$, $df = 2$, $p = .11$). The officer is more likely to arrest the offender when the victim is under the influence of drugs or alcohol.

2. **Offender characteristics**

Similar to characteristics pertaining to the victim, both the presence of an injury on the offender ($\chi^2 = 21.37$, $df = 1$, $p < .001$) and being under the influence of drugs or alcohol ($\chi^2 = 19.02$, $df = 2$, $p < .001$) are significantly associated with an arrest. Additionally, the use of a weapon by the offender is also significantly associated with the arrest of the offender ($\chi^2 = 11.58$, $df = 1$, $p < .001$).

3. **Case characteristics**

Falling within the less stringent range of significance set for the purpose of variable selection, it was found that the relationship between the victim and offender is associated with arrest ($\chi^2 = 6.31$, $df = 3$, $p < .10$), as well as the caller to emergency services ($\chi^2 = 7.61$, $df = 4$, $p < .25$). Arrest was more likely in cases with married and dating individuals, and less likely in cases with family members. Cases where the neighbor called 911 were more likely end with arrest. Additionally, if the call was repeat in nature, meaning the officer or colleague
had responded to a domestic violence call at the same address in the past, an arrest was more likely to occur ($\chi^2 = 1.40, df = 1, p < .25$).

4. **Officer characteristics**

None of the officer characteristics were significantly associated with arrest other than the rank of the police officer ($\chi^2 = 2.80, df = 2, p = .25$). Officers assigned to a special unit (detective or field training officer) were more likely to make an arrest.

5. **Officer perceptions**

Officer perceptions about victim and offender demeanor and measures of the likelihood of future risk were assessed for a relationship with the resolution using simple logistic regression, as these variables were measured on an ordinal scale (see Table VIII). Officer perception of the demeanor of the offender is significantly associated with arrest (OR = 1.22, $p < .25$). The more resistant the demeanor rating, the more likely an officer was to use arrest. For officer perception of the likelihood of future violence, for every unit increase on the scale (higher scores meaning more likely) the odds of arrest were 41% higher (OR = 1.41, $p < .05$). For every unit increase in the rating of future violence for the couple, the odds of arrest were almost two times higher (OR = 1.94, $p < .001$). The rating of supervisor support for the enforcement of domestic violence statutes was not significant; therefore, no organizational level variables were included in the multivariate models.
TABLE VIII

Simple Logistic Regression Results for IV on DV

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>OR</th>
<th>SE</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim demeanor</td>
<td>247</td>
<td>0.91</td>
<td>0.16</td>
<td>.64-1.30</td>
</tr>
<tr>
<td>Offender demeanor</td>
<td>245</td>
<td>1.22+</td>
<td>0.18</td>
<td>.91-1.62</td>
</tr>
<tr>
<td>Likelihood of future violence for couple</td>
<td>247</td>
<td>1.41*</td>
<td>0.18</td>
<td>1.10-1.81</td>
</tr>
<tr>
<td>Likelihood of future harm to victim by offender</td>
<td>246</td>
<td>1.94**</td>
<td>0.28</td>
<td>1.46-2.57</td>
</tr>
<tr>
<td>Likelihood of future call</td>
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<td>Supervisor Support</td>
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<td>.61-1.89</td>
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</table>

*** p<.001, ** p<.01, *p<.05, +p<.25

E. Testing for Correlation

Chi-square tests were performed as regression is sensitive to multicollinearity and the strength of the relationship between variables, measured by Cramer’s $V$, is reported in Table IX. The variables of the victim being willing to sign a complaint and actually signing a complaint were very strongly associated with one another ($V = .85$), suggesting redundancy in these measures. Actually signing a complaint was retained for analysis, as it is a more concrete measure of the wishes of the victim rather than the officer’s perception of the victim’s wishes. The sex of the victim and offender ($V = -.70$) and the race of the victim and the offender ($V = .87$) were also strongly associated. Only the sex and race characteristics of the victim were retained for the analysis.

There was a strong correlation between two measures of officer perceptions, including: violence for the couple and the likelihood of future harm to the victim by the offender (see Table X). These two items were combined to created one measure of future risk, which has a Cronbach’s Alpha = .87.
### TABLE IX

*Cramer's V - Strength of Association between Covariates*

<table>
<thead>
<tr>
<th></th>
<th>Victim Injury reported</th>
<th>Victim willing to sign complaint</th>
<th>Victim signed a complaint</th>
<th>Victim drugs/alcohol</th>
<th>Victim Sex</th>
<th>Victim Race</th>
<th>Offender drugs/alcohol</th>
<th>Offender injury reported</th>
<th>Offender injury weapon</th>
<th>Offender use of a weapon</th>
<th>Offender Sex</th>
<th>Offender Race</th>
<th>Caller</th>
<th>Repeat call</th>
<th>Relationship</th>
<th>Officer Rank</th>
<th>Officer Sex</th>
<th>Officer Race</th>
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TABLE X

<table>
<thead>
<tr>
<th>Strength of Association between Continuous Covariates</th>
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<td>Future harm</td>
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<tr>
<td>Future violence</td>
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<tr>
<td>Offender demeanor</td>
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<tr>
<td>Victim demeanor</td>
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F. **Summary of Bivariate Results**

Case and decision-maker factors were found to be significantly associated with the outcome of call resolution. These factors are related to the victim, the offender, as well as the situation. Additionally, police officer rank and officer perceptions related to future risk and demeanor were also associated with arrest. Figure 6 depicts the variables that were included and excluded after data screening, univariate and bivariate analysis. Figure 7 depicts the updated hypothesized mediating relationship.
Figure 6. Updated Variables of Interest Within the Decision Making Ecology Framework

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<tr>
<th>Case Factors</th>
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<th>Retained</th>
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<tr>
<td>Victim willing to sign complaint</td>
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<td>Victim age/race/sex</td>
</tr>
<tr>
<td>Offender age/race/sex</td>
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<td>Victim injury reported</td>
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<tr>
<td>Offender on scene</td>
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<td>Victim signs a complaint</td>
</tr>
<tr>
<td>Violation of an order of protection</td>
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<td>Victim use of drugs/alcohol</td>
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<td>Witnesses present</td>
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<td>Offender use of a weapon</td>
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<tr>
<td>Children present</td>
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<td>Offender injury reported</td>
</tr>
<tr>
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<td></td>
<td>Offender use of drugs/alcohol</td>
</tr>
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<td></td>
<td>Repeat call</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Victim/Offender relationship</td>
</tr>
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<td>Caller</td>
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<td>Domestic violence policies</td>
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<tr>
<td>Proportion of female officers</td>
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<td>Officers per capita</td>
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<table>
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<td>% below poverty level</td>
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<tr>
<td>Indicators of social disorganization</td>
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</table>

<table>
<thead>
<tr>
<th>Decision Maker Factors</th>
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<th>Retained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic violence training</td>
<td></td>
<td>Officer age/race/sex and rank</td>
</tr>
<tr>
<td>Years on the job</td>
<td></td>
<td>Perception of future risk</td>
</tr>
<tr>
<td>Perception of offender demeanor</td>
<td></td>
<td>Perception of victim demeanor</td>
</tr>
</tbody>
</table>
G. **Regression Analysis**

1. **Model Specification**

   In the first model, variables that were significantly associated with the dependent variable at the bivariate level were included, as well as those that were specifically hypothesized to be associated with the outcome variable (use of weapon and demeanor of victim/offender), as well as conceptually relevant (sex and race of all parties) (see Table XI, Model 1). This model was significant (LR chi2(24)= 176.68, $p < .001$). Among those variables related to the victim, signing a complaint, injury, and sex were significant predictors of arrest. In cases where a victim signed a complaint relative to those that did not, the odds of arrest were 64.5 times larger (OR = 64.50, $p < .001$, 95% CI [15.28 - 272.20]). When a victim reported an injury relative to those that did not, the odds of arrest were almost 6 times larger (OR = 5.69, $p < .001$, 95% CI [2.14 - 15.16]) versus no arrest. The odds of arrest of the offender were 81% lower when the victim is a
woman versus a man (OR = .19, p < .01, 95% CI [0.06 - 0.57]). Offender characteristics of a report of an injury significantly predicted arrest, with the odds of arrest of the offender almost 9 times larger when the offender reported an injury (OR = 8.84, p < .05, 95% CI [1.49 – 52.25]).

The case factors related to the situation itself revealed that the caller to emergency services being the neighbor as a significant predictor of arrest. The odds of arrest versus no arrest increased almost 23 times (OR = 22.81, p < .001, 95% CI [4.67 – 111.45]) when a neighbor called emergency services to report the incident relative to other categories of callers including the victim, other family members, an unknown party, or other individuals. Finally, two officer perceptions significantly influenced the decision to arrest. For every unit increase in an officer’s perception of future risk of harm and violence for the couple, the odds of arrest increase 74% (OR = 1.74, p < .01, 95% CI [1.16 – 2.61]).
### TABLE XI

**Summary of Tested Regression Models**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1 (n = 234)</th>
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<th></th>
<th>Model 2 (n = 236)</th>
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<th>Final Model (n = 236)</th>
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<td>CI</td>
<td>OR</td>
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<td>CI</td>
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<tr>
<td>Victim reported injury (yes)</td>
<td>5.69***</td>
<td>2.85</td>
<td>2.14 - 15.16</td>
<td>5.14***</td>
<td>2.44</td>
<td>2.02 - 13.05</td>
<td>5.1***</td>
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<td>8.01</td>
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<td>1.78</td>
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<td>dating</td>
<td>0.78</td>
<td>0.41</td>
<td>.28 - 2.21</td>
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<td>separated</td>
<td>0.48</td>
<td>0.42</td>
<td>.09 - 2.64</td>
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<td>family</td>
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<td>.33 - 9.38</td>
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<tr>
<td>yes</td>
<td>0.96</td>
<td>0.51</td>
<td>.34 - 2.70</td>
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<td>2.02</td>
<td>1.60</td>
<td>.43 - 9.56</td>
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<tr>
<td>PO special assignment</td>
<td>0.91</td>
<td>0.42</td>
<td>.36 - 2.27</td>
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<td></td>
<td></td>
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<tr>
<td>supervisor</td>
<td>1.06</td>
<td>1.01</td>
<td>.16 - 6.89</td>
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<td></td>
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<tr>
<td>Constant</td>
<td>0.23</td>
<td>0.30</td>
<td>.02 - 2.10</td>
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</tbody>
</table>

(LR chi2(24)= 176.68, p<.001)  (LR chi2(17)= 177.07, p<.001)  (LR chi2(15)= 174.65, p<.001)

*** p< .001, ** p< .01, *p< .05
The odds of arrest decrease based on officer perception of the victim’s demeanor as more resistant. In other words, for every unit increase of the rating of the victim’s demeanor (a higher rating indicating a more resistant demeanor), the odds of arrest of the offender decreased 51% (OR = .49, \( p < .05 \), 95% CI [0.26 – 0.94]). In this model, the relationship of the couple, the call being repeat in nature, and officer rank were not significant. Additionally, race, use of a weapon, the use of drugs or alcohol, and the demeanor of the offender were not significant.

The next model removed the relationship of the couple, repeat call, and officer rank from the model, retaining conceptually important variables that were non-significant in the first model. This model (Table XI, Model 2) was significant (LR chi2(17)= 177.08, \( p < .001 \)). The significant predictors in this model did not change. As the race variables continued to not produce significant results, they were removed from the final model, which was then compared to Model 2 for fit. The difference BIC’ between these two models demonstrated strong support for utilizing Model 3, the more concise model (-84.18 – (-92.69) = 8.51).

2. **Results**

The best-fitting model (Model 3) was significant (LR chi2(15)= 174.65, \( p < .001 \)), and the same predictors from previous models plus offender use of drugs or alcohol are significant in this model. The odds of arrest of the offender increase when a victim signs a complaint relative to not signing a complaint (OR = 41.74, \( p < .001 \), 95% CI [11.63 – 149.76]). There was low variability in officer decisions when a complaint was signed, meaning that there were very few cases where an arrest was not made when a complaint was signed. The highly skewed distribution of arrest decisions into this one category yielded a very large confidence interval for this measure. While significant, this indicates that the effect was not very precisely measured. That said, this variable makes an important contribution to understanding officer
decisions to arrest and therefore was retained. When a victim reports an injury, the odds of arrest also increase (OR = 5.10, \( p < .001 \), 95% CI [2.02 - 12.86]). The victim being female decreases the odds of arrest of the offender (OR = .21, \( p < .01 \), 95% CI [0.07 - 0.59]), with cases with female victims less likely to result in arrest. Factors related to the offender that significantly predict arrest include the offender using drugs or alcohol at the time of the call (OR = 2.95, \( p < .05 \), 95% CI [1.10 - 7.94]) and reporting an injury (OR = 7.69, \( p < .05 \), 95% CI [1.50 - 39.42]). The odds of arrest were 3 times higher in cases where an offender was using drugs or alcohol, and just over 7.5 times higher when the offender reports an injury. The final case-related factor, which pertains to the situation itself, is a neighbor was the caller to emergency services. The odds of arrest are about 16.5 times higher (OR = 16.59, \( p < .001 \), 95% CI [4.04 - 68.15]) when a neighbor called the police relative to the victim calling, as well as other family members including the offender, other third parties (hotel personnel, passersby), or unknown callers.

Demographic variables and training, as well as the officer perceptions about demeanor of the offender were not significantly associated with arrest. However, several variables representing officer perceptions related to the situation were significant. Odds of arrest decreased based on officer perception of the demeanor of the victim (OR = .52, \( p < .05 \), 95% CI [0.29 - 0.96]). For every unit increase in rating of victim demeanor (with a higher score indicating more resistant demeanor), the odds of arrest decreased 48%. Finally, officer perception of the likelihood of future risk of violence/harm increased the odds of arrest 61% (OR = 1.61, \( p < .001 \), 95% CI [1.13 - 2.30]). These results will be further explained in the Discussion chapter.
3. **Post-estimation**

Post-estimation tests were run on Model 3 for goodness of fit, specification, and multicollinearity. In logistic regression tests there is not a meaningful equivalent to the $R^2$ value that is used in linear regression models, which measures the proportion of variance accounted for by the model; therefore, Tjur’s effect size was used. Tjur’s effect size (Tjur, 2009), measures the difference in predicted probability for the two groups, arrest and not arrest. This metric indicated a moderate effect size (.61). Tests for misspecification were also run and the findings were not significant ($p = .31$), indicating no specification error and that relevant variables are missing only by chance. Finally, the independent variables used in the model were tested for multicollinearity. Both the variance inflation factor for each variable and tolerance for each variable is relatively close to 1, indicating that the variables are not very correlated with one another (mean VIF = 1.21).

4. **Summary of Logistic Regression Results**

The results of the preliminary regression analysis indicate that case-related factors, specifically a victim signing a complaint, sex of the victim, victim and offender reporting an injury, offender under the influence of drugs or alcohol, and neighbor calling the police are significant predictors of arrest. Additionally, decision-maker factors that are related to arrest are perceptions of victim demeanor and likelihood of future risk. As future risk was determined to be a significant predictor of arrest and the mediation hypothesis could be tested, path analysis was used to estimate an overall model that includes both direct and indirect effects of these above-listed variables.
H. Path Analysis

Generalized structural equation modeling (GSEM) was used for path analysis to answer the overall research question: what factors influence police action in cases of domestic violence? The main hypotheses explored remain the same; however, the specific variables that influence arrest decisions were modified to reflect the findings of the preliminary regression models:

H1: Case factors will influence officer decisions, specifically:
   a. victim signing a complaint
   b. sex of the victim
   c. report of injuries from victim and offender
   d. offender under the influence of drugs or alcohol, and
   e. neighbor calling the police will influence the decision to arrest

H2: Officer case-related assessments will influence an officer’s decision to arrest, specifically:
   a. officer perception of risk will influence arrest decisions

H3: The relationship between case factors and officer decision will be mediated by an officer’s perception of risk in the case, specifically:
   a. the relationship between victim sex and arrest
   b. the relationship between offender drug/alcohol use and arrest

GSEM is ideal for this analysis as it allows the modeling of both direct (H1 and H2) and indirect relationships (H3) and the flexibility to model variables with different levels of measurement (future risk is continuous; resolution is dichotomous) (Garson, 2015). While the logistic regression model produced results indicating variables that have a direct influence on arrest decisions, it is hypothesized that this relationship with some case variables is mediated by an
officer perception of risk. Path analysis allowed both direct and mediating relationships to be tested.

1. **Model Specification**

An initial path model was developed using the significant predictors of arrest from the logistic regression model, specifying relationships between all exogenous variables to both the mediator (future risk) and the endogenous variable (resolution), as this was an exploratory analysis. Table XII lists the coefficients (regression weights or log odds) and significance for each of these paths. All of the direct paths to call resolution (arrest or no arrest) were significant with the exception of the demeanor of the victim. The paths to future risk from victim sex and offender drug or alcohol use by the offender were significant. In the second model, the variable victim demeanor was removed completely along with any the non-significant paths, resulting in the final model pictured in Figure 8. BIC was compared for the full and constrained model. The BIC for the constrained model was lower (1136.67 versus 1107.36), indicating better model fit.
### TABLE XI

**Path Analysis Full Model, All Paths (n = 244)**

<table>
<thead>
<tr>
<th>Future Risk (indirect) &lt;-- Regression Weights</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim injury (yes)</td>
<td>0.37</td>
<td>0.21</td>
<td>0.08</td>
</tr>
<tr>
<td>Victim sex (female)</td>
<td>0.61</td>
<td>0.20</td>
<td><strong>0.003</strong></td>
</tr>
<tr>
<td>Offender drug use (yes)</td>
<td>0.53</td>
<td>0.20</td>
<td><strong>0.006</strong></td>
</tr>
<tr>
<td>Offender drug use (unknown)</td>
<td>0.80</td>
<td>0.28</td>
<td><strong>0.003</strong></td>
</tr>
<tr>
<td>Offender injury (yes)</td>
<td>0.32</td>
<td>0.21</td>
<td>0.23</td>
</tr>
<tr>
<td>Victim sign complaint (yes)</td>
<td>0.21</td>
<td>0.21</td>
<td>0.30</td>
</tr>
<tr>
<td>Caller (related party)</td>
<td>-0.23</td>
<td>0.24</td>
<td>0.34</td>
</tr>
<tr>
<td>Caller (neighbor)</td>
<td>-0.07</td>
<td>0.26</td>
<td>0.78</td>
</tr>
<tr>
<td>Caller (other)</td>
<td>-0.23</td>
<td>0.27</td>
<td>0.39</td>
</tr>
<tr>
<td>Caller (unknown)</td>
<td>0.43</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Victim demeanor</td>
<td>-0.23</td>
<td>0.24</td>
<td>0.34</td>
</tr>
<tr>
<td>Future risk</td>
<td>0.33</td>
<td>0.15</td>
<td><strong>0.03</strong></td>
</tr>
</tbody>
</table>

### TABLE XII

**Path Analysis Full Model, All Paths (n = 244)**

<table>
<thead>
<tr>
<th>Resolution (direct) &lt;-- Log Odds</th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Victim injury (yes)</td>
<td>1.74</td>
<td>0.44</td>
<td><strong>0.000</strong></td>
</tr>
<tr>
<td>Victim sex (female)</td>
<td>-1.30</td>
<td>0.48</td>
<td><strong>0.007</strong></td>
</tr>
<tr>
<td>Offender drug use (yes)</td>
<td>0.89</td>
<td>0.46</td>
<td>0.05</td>
</tr>
<tr>
<td>Offender drug use (unknown)</td>
<td>0.11</td>
<td>0.65</td>
<td>0.86</td>
</tr>
<tr>
<td>Offender injury (yes)</td>
<td>1.98</td>
<td>0.79</td>
<td><strong>0.01</strong></td>
</tr>
<tr>
<td>Victim sign complaint (yes)</td>
<td>3.69</td>
<td>0.6</td>
<td><strong>0.000</strong></td>
</tr>
<tr>
<td>Caller (related party)</td>
<td>0.76</td>
<td>0.55</td>
<td>0.17</td>
</tr>
<tr>
<td>Caller (neighbor)</td>
<td>2.28</td>
<td>0.63</td>
<td><strong>0.000</strong></td>
</tr>
<tr>
<td>Caller (other)</td>
<td>0.77</td>
<td>0.67</td>
<td>0.26</td>
</tr>
<tr>
<td>Caller (unknown)</td>
<td>0.33</td>
<td>1.07</td>
<td>0.76</td>
</tr>
<tr>
<td>Victim demeanor</td>
<td>-0.51</td>
<td>0.29</td>
<td>0.08</td>
</tr>
<tr>
<td>Future risk</td>
<td>0.33</td>
<td>0.15</td>
<td><strong>0.03</strong></td>
</tr>
</tbody>
</table>
2. **Results**

The final model (Figure 8) fit the data well, as measured by using Tjur’s effect size (.58) comparing the difference in means of the predicted probability for arrest and no arrest. This model includes direct effects for the victim signing a complaint, the victim reporting an injury, the offender reporting an injury, and a neighbor as the caller to emergency services. This model also tests the direct effect of the sex of the victim and drug or alcohol use by the offender on arrest decisions, as well as the potential mediating relationship of officer perception of risk and these variables. Table XIII lists the results of this final path model.
Figure 8. Final Path Model

Victim Sex (female)
Offender drug use (unknown)
Offender drug use (yes)
Victim sign complaint (yes)
Victim injury (yes)
Offender injury (yes)
Caller (neighbor)
Caller (related party)
Caller (other)
Caller (unknown)

Future Risk
Gaussian

Resolution (arrest)
binomial
logit

\[ \epsilon_1 = 1.9 \]

\[ \text{Resoution (arrest)} = -3.2 \]

*** p<.001, ** p<.01, * p<.05
### TABLE XIII

*Final Path Model (n = 244)*

<table>
<thead>
<tr>
<th>Future Risk &lt;---</th>
<th>Regression Weights</th>
<th>Coef.</th>
<th>SE</th>
<th>p</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim sex (female)</td>
<td>0.63</td>
<td>0.21</td>
<td><strong>0.002</strong></td>
<td>.22 - 1.04</td>
<td></td>
</tr>
<tr>
<td>Offender drug use (yes)</td>
<td>0.72</td>
<td>0.19</td>
<td><strong>0.00</strong></td>
<td>.34 - 1.10</td>
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</tr>
<tr>
<td>Offender drug use (unknown)</td>
<td>0.98</td>
<td>0.26</td>
<td><strong>0.000</strong></td>
<td>.47 - 1.50</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resolution &lt;---</th>
<th>Log Odds</th>
<th>Coef.</th>
<th>SE</th>
<th>p</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim injury (yes)</td>
<td>1.71</td>
<td>0.44</td>
<td><strong>0.000</strong></td>
<td>.86 - 2.57</td>
<td></td>
</tr>
<tr>
<td>Offender drug use (yes)</td>
<td>-1.21</td>
<td>0.47</td>
<td><strong>0.01</strong></td>
<td>-2.13 - -.29</td>
<td></td>
</tr>
<tr>
<td>Offender drug use (unknown)</td>
<td>0.84</td>
<td>0.45</td>
<td>0.06</td>
<td>-.05 - 1.72</td>
<td></td>
</tr>
<tr>
<td>Offender injury (yes)</td>
<td>0.07</td>
<td>0.64</td>
<td>0.91</td>
<td>-1.18 - 1.33</td>
<td></td>
</tr>
<tr>
<td>Victim sign complaint (yes)</td>
<td>2.02</td>
<td>0.79</td>
<td><strong>0.01</strong></td>
<td>.46 - 3.57</td>
<td></td>
</tr>
<tr>
<td>Caller (related party)</td>
<td>3.58</td>
<td>0.58</td>
<td><strong>0.000</strong></td>
<td>2.43 - 4.73</td>
<td></td>
</tr>
<tr>
<td>Caller (neighbor)</td>
<td>0.63</td>
<td>0.54</td>
<td>0.24</td>
<td>-.43 - 1.70</td>
<td></td>
</tr>
<tr>
<td>Caller (other)</td>
<td>2.22</td>
<td>0.62</td>
<td><strong>0.000</strong></td>
<td>1.0 - 3.44</td>
<td></td>
</tr>
<tr>
<td>Caller (unknown)</td>
<td>0.68</td>
<td>0.66</td>
<td>0.3</td>
<td>-1.54 - 2.32</td>
<td></td>
</tr>
<tr>
<td>Future risk</td>
<td>0.3</td>
<td>0.14</td>
<td><strong>0.04</strong></td>
<td>.01 - .58</td>
<td></td>
</tr>
</tbody>
</table>
Arrest is predicted by the victim signing a complaint (log odds = 3.58, \( p < .001 \)), the victim reporting an injury (log odds = 1.71, \( p < .001 \)), the offender reporting an injury (log odds = 2.02, \( p < .05 \)), and the neighbor calling emergency services (log odds = 2.22, \( p < .001 \)). These variables were found to only have significant direct effects on the arrest decisions. Converting these terms to odds ratios (see Table XIV), this model demonstrates that the odds of arrest increased 35% when a victim signed a complaint against the offender. The odds of arrest were 5.5 times larger in cases where a victim reported an injury and 7.5 times larger when the offender reported an injury. Finally, the neighbor calling emergency services relative to other parties increased the odds of arrest by 9 times.

**TABLE XIV**

*Direct, Indirect and Total Effects for Path Model, Odds Ratios (n = 244)*

<table>
<thead>
<tr>
<th></th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victim injury (yes)</td>
<td>5.54</td>
<td></td>
<td>5.54</td>
</tr>
<tr>
<td>Victim sex (female)</td>
<td>0.30</td>
<td>1.21</td>
<td>0.36</td>
</tr>
<tr>
<td>Offender drug use (yes)</td>
<td>2.31</td>
<td>1.24</td>
<td>2.87</td>
</tr>
<tr>
<td>Offender drug use (unknown)</td>
<td>1.08</td>
<td>1.34</td>
<td>1.44</td>
</tr>
<tr>
<td>Offender injury (yes)</td>
<td>7.54</td>
<td></td>
<td>7.54</td>
</tr>
<tr>
<td>Victim sign complaint (yes)</td>
<td>1.35</td>
<td></td>
<td>1.35</td>
</tr>
<tr>
<td>Caller (related party)</td>
<td>1.89</td>
<td></td>
<td>1.89</td>
</tr>
<tr>
<td>Caller (neighbor)</td>
<td>9.18</td>
<td></td>
<td>9.18</td>
</tr>
<tr>
<td>Caller (other)</td>
<td>1.98</td>
<td></td>
<td>1.98</td>
</tr>
<tr>
<td>Caller (unknown)</td>
<td>1.40</td>
<td></td>
<td>1.40</td>
</tr>
<tr>
<td>Future risk</td>
<td>1.35</td>
<td></td>
<td>1.35</td>
</tr>
</tbody>
</table>
The sex of the victim and the use of drugs or alcohol by the offender have significant relationships both with arrest and with officer perception of risk, the mediating variable. The sex of the victim (log odds = -1.21, p < .05) has a significant direct effect on arrest, as well as a significant path to perception of future risk, which also has a significant effect on the decision to arrest. The direct effect of the sex of the victim on the decision to arrest indicates that when a victim is female, the odds of arrest are 70% less likely (OR = .30). Ratings of future risk significantly increased (regression weight = .63, p < .01) when the victim is female, which indicates a higher risk rating for female victims. The total effect of the victim being female on the arrest of the offender is a decrease in the odds of arrest by 64%.

The total effect of drug use by the offender increases the odds of arrest by three times (OR = 2.87, p < .05). The path from offender drug/alcohol use and the rating of future risk was significant (regression weight = .72, p < .001). In other words, the use of drugs or alcohol resulted in an increased rating of future risk by police officers. In this path model, the direct paths of the use of drugs or alcohol to arrest were not significant. The total effect of unknown drug or alcohol use by the offender was not significant; however, the path from unknown drug/alcohol use to future risk was significant.

This path model identifies that sex of the victim and the use of drugs or alcohol by the offender are related to officer perception of risk. In other words, these variables are influencing officer perception of risk, and officer perception of risk influences decisions to arrest. The relationship between perception of risk and arrest is significant (log odds = .33, p < .05). In terms of odds ratios, the odds of arrest are increased 35% for every unit increase on the rating of future risk.
4. **Post-estimation**

This model was found to fit the data well, with the absolute difference in predicted probability for the two groups, arrest and not arrest equaling .58. Predicted versus actual outcomes were compared to yield the sensitivity and specificity of this model. The sensitivity (percentage of cases with arrest correctly identified) is 84% and the specificity (the percentage of all not arrest correctly identified) is 87%. The model predicts outcomes very well, with a slightly better prediction of cases resolved by not arresting.

5. **Summary of Path Analysis Results**

Overall, the victim signing a complaint and injuries to the victim and the offender, as well as the neighbor calling 911, the sex of the victim, and drug or alcohol use of the offender have a total effect on the decision to arrest. This model also identified that both sex of the victim and use of drugs or alcohol by the offender have a relationship with officer perception of risk, which also influences arrest.
VI. DISCUSSION

A. Summary of Findings

The findings of this research illuminate important influences on police decisions to arrest in intimate partner violence cases. These findings expand the knowledge base on the factors that influence arrest decisions and identify the role that officer perception of risk plays in how officers interpret several of these factors. As Fluke, Baumann, and Dettlaff (n.d.) note, assessments are based on information that is often “noisy and uncertain” (p. 20) and made in emotionally charged, high-pressure situations. Officers are often faced with these unclear situations, particularly in cases of domestic violence (Johnson, 2004). The use of the Decision Making Ecology in this study helps to identify the influential factors in arrest decisions, as well as the important relationship of officer perception of risk. While not all of the components were tested due to issues with missing data, this study did identify the role that case factors play in influencing officer decisions to arrest and in understanding the intervening relationship of officer perception of risk.

As hypothesized, case factors influenced arrest decisions. In the context of the Decision Making Ecology framework, case factors are information from the situation that influence an officer’s assessment (distinguished from action) of the situation (Baumann, Dalgleish, Fluke, & Kern, 2011). Prior research supports the substantial influence of case-related factors in arrest decisions made by police (Dichter, et al., 2011). As domestic violence statutes allow officers to make warrantless arrest, it is logical that they rely on the evidence of a situation to make their decisions.
While some of the case-related factors that were found to influence arrest would be considered relevant to establishing probable cause for arrest, others are not. Recall that some researchers investigating case factors influencing arrest decisions distinguish between legal and extralegal factors. Again, legal factors are those factors that have legal significance and extralegal are those factors that do not. While this distinction is not entirely clear (see Literature Review), for the variables found to influence arrest in this study, it is useful to consider legal versus extralegal factors in interpreting these effects.

An injury to the victim increases the odds of arrest. This finding may be interpreted as direct evidence of a crime, supporting an officer having probable cause to make an arrest. This finding is supported by past research that has also found victim injury to be associated with arrest (Eitle, 2005; Robinson and Chandek, 2000a; Waaland and Keeley, 1985). In Illinois, where arrest is not mandatory in domestic violence cases, a victim with an injury provides evidence of a crime, which supports an arrest. It also could be interpreted that an injury to a victim is a signal to a police officer of a more urgent or dangerous situation and supports the need to remove the threat of future harm to the victim (Kane, 2000). What is unknown from these findings is the severity of these injuries and how officers interpreted these injuries. This research did not inquire about the severity of injuries, as past research has posited that injury severity is not well-operationalized (Eigenberg, Scarborough, & Kappeler, 1996); however, future research should explore how severity influences decision-making.

The odds of arrest are also larger when a victim signs a complaint. While this variable has not been considered in other research, officers interviewed in a previous qualitative study (Fulambarker, 2014) talked at length about victims not being willing to sign a complaint. As this variable seemed to play a role in how officers perceived the effectiveness of their response, it
was included in this study. The decision to make an arrest in cases where a complaint is signed may be an indication that an officer is considering the wishes of the victim and is more likely to make an arrest when a complaint is signed relative to not being signed. Prior research (Eigenberg, Scarborough, & Kappeler, 1996) found that victim preference was linked to arrest.

Alternatively, the measure of signing a complaint could be related to an officer’s belief that a victim’s claims have “merit” or may be seen as a sign of victim cooperation (Robinson & Chandek, 2000a). In other words, if a victim does not sign a complaint, an officer may assume that charges will not be brought against the offender (if the victim does not express an interest in participating) or that if charges are brought following an arrest (with no complaint signed) they will be dropped. Prior research (Horwitz et al., 2011; Johnson, 2004; Fulambarker, 2014) has discussed the frustration that this lack of “cooperation” on the part of the victim creates for officers and therefore the case may be interpreted as not “worth” the arrest. One caution in interpreting the findings regarding this variable is that there are very few cases in which a victim signed a complaint and an offender was not arrested (5 cases). There is low variability in officer arrest decisions in the cases where a complaint was signed. This low rate of variation indicates that when a victim signs a complaint, an officer almost always makes an arrest. Therefore, this variable is important to better understand in the context of officer decisions. Future qualitative work should focus on understanding the meaning and perceptions of officers about victims signing a complaint to be able to better interpret the role that this variable plays in decision-making.

An injury to the offender increased the odds of an arrest, and may be an indication of a more violent situation. In most of the cases where the offender was injured, the victim was also injured (88%), which may mean that an offender was injured by the victim in self-defense. This
possibility cannot be fully determined by the data as the question asked only if each party reported an injury and did not ask for details regarding the severity of the injury. While the offender may have also been injured, we cannot know if the injury was more or less severe than the victim and under what circumstances it occurred.

Finally, a neighbor calling the police influenced the call resolution, increasing the odds of arrest. A neighbor calling the police relative to other parties (victim, related party such as offender or children, unknown or other individual) increased the odds of arrest. Victims made about half of 911 calls in this sample; however, officers are more likely to make an arrest when a neighbor calls. As a neighbor may represent an independent (unrelated) third party to police, a call from one may be perceived as more serious or a more trustworthy source. An officer may see someone involved in the case, such as the victim, the offender, a child or another family member as having loyalties to one party or another and therefore not reliable. However, this variable only considers the person who called 911 (information usually shared with the officers by a dispatcher), not if this person witnessed the incident. In fact, the presence of a witness was not a significant predictor of arrest in this analysis. It is also possible that the situation was more serious causing a neighbor to call the police in the first place, or that an officer believes it to be more serious.

Officer perception of risk was a combined measure of two questions that asked officers to rate the likelihood of future violence for this couple and the likelihood of future harm to the victim by the offender. An officer perceiving there to be greater risk in a situation predicts arrest, with a higher rating of risk increasing the odds of arrest. The path model used in this analysis also finds a relationship between the sex of the victim and drug use by the offender to
influence the rating of future risk. Cases where the victim is female and there is drug use by the offender yielded a higher rating of risk for officers.

A police officer may perceive female victims as needing more protection or they may understand that women are the overwhelming victims of intimate partner violence and therefore rate their future risk to be higher. What is interesting about this finding is that while there was a positive relationship between victim sex and perception of risk, the relationship between victim sex and call resolution was negative. In other words, the total effect of victim sex in this model demonstrated that officers are less likely to arrest the offender when the victim is female. While there was not a significant indirect effect in this model, the path from victim sex to risk is significant, as is the total effect of this variable, and it could be interpreted that a higher rating of risk may diminish a portion of the effect of victim sex on resolution.

In considering the total effect of victim sex on arrest decisions, the odds of arrest decreased. Prior research on the relationship between the sex of the victim and/or offender has had mixed findings. Most of this research centers on the sex of the victim only when considering if the victim is arrested (Hirschel, et al., 2007). One possibility to consider in interpreting an officer being less likely to arrest an offender when the victim is female is that officers see female victims as “normal” victims and perceive these situations as less warranting of formal action such as arrest. Alternatively, it is also possible that male victims may only call police in very serious domestic violence situations, which offers another explanation for why arrest was made more often with male victims. This study did not collect data on individual officer attitudes about domestic violence or violence against women, so this conclusion cannot be drawn directly from this data and will require further study.
Finally, officer decisions were influenced by offender drug and/or alcohol use. The total effect of drug or alcohol use increased the odds of arrest; however, the direct effect of drug/alcohol use was not significant. There was a significant relationship with officer perception of risk, with drug use indicating a higher risk rating. Being under the influence of drugs or alcohol may be interpreted by a police officer as being out of control, increasing the risk of future violence and may not directly influence officer decisions.

Prior studies using the Decision Making Ecology framework (Dettlaff et al., 2011; Rivaux et al., 2008) identify the role of risk assessment to further understand the decision-making process. In this study, officer perception of risk is higher for female victims; however, the odds of arrest decrease. Further, offender use of drugs or alcohol is also related to perception of risk and the decision to arrest. These findings suggest that officer perception of risk may help better understand decision-making, and future research that is able to investigate the role of community and organizational variables can provide a more complete picture of the decision-making context. This study and future research aimed at examining risk assessment has critical implications for social work research and practice, and for the well-being of survivors.

B. Limitations

The limitations to this study include those related to bias, as well as threats to external and internal validity. First, the data were collected from self-report of police officers asking them to report on the most recent call to which they responded with a specific outcome. While recall bias should not be of concern due to the short recall period, there is a potential for bias in that officers may have reported on extreme cases or more memorable incidents. Additionally, there is a potential for social-desirability bias in that officers may have reported only on cases in which they felt they did the “right” thing. Attempts to mitigate this potential for bias included
asking officers to report on the most recent call to which they responded. There was variance in
the call outcome, with about 55% of cases resulting in arrest, indicating that officers did not only
report on cases where they made a “good arrest.”

The data collection instrument was created for this study; therefore, the validity and
reliability of the measure are unknown. A panel of police officers and police research experts
was used to assess content validity. Finally, the sampling strategy and resulting sample limits
the generalizability of the results. The study population is from Illinois, which does not have
mandatory arrest laws, which may influence officer decisions. The sampling of ongoing training
courses may have biased the sample, and even though this sample included officers from over
100 different departments, it is unknown if these officers are representative of Illinois officers in
general. Additionally, the sample is this study was mainly white, male police officers. Finally,
it is important to consider the temporal context of this study and recognize that the influence of
high levels of scrutiny on police officers in 2015 may influence the cases officers identified and
the nonsignificant findings related to demeanor. While past research has found demeanor to
influence officer decisions, in the current context officers may be relying more on concrete
evidence of crimes.

A limitation of this analysis is that it only examined influences on arrest decisions. While
the factors that influence informal actions were intended to be a part of this study, the limited
number of responses of cases where no action was taken restricted the ability to do this analysis.
Generally, arrest is considered rare in the daily work of police officers (Black, 1971). Officers
routinely employ informal methods for resolving calls. While not included in the final analysis
of this study, officers did employ informal actions in 93% of cases when an arrest was not made
and used informal actions along with arrest in 47% of cases. These informal resolutions may
include writing and filing a report, informing a victim of his/her rights, advising medical
treatment, or seizing weapons (see Results chapter, Table II). Future research that considers
informal resolutions will allow for a more complete picture of influences of a full range of police
action. Additionally, it is important to understand informal actions taken by police, as arrest is
not always the desired or best outcome for survivors. Acknowledging and supporting that some
survivors choose to not engage with the criminal legal system, it is necessary to understand the
full range of police decisions and how they are made. Future research can seek to identify more
cases where no action is taken for a basis of comparison to understand the influences of these
less formal responses.

Another consideration in interpreting these findings is that this data only includes cases
where officers indicated that they could determine a primary aggressor. The significant
difference in arrest outcomes for cases where a primary aggressor was and was not determined is
an important finding and consideration. Clearly determining a primary aggressor is also
important to the decision to arrest. In “situationally ambiguous” (Durfee, 2012) cases where it
was less obvious who the offender is, officers are less likely to make an arrest. Future work
should focus on this finding with qualitative research to understand why a primary aggressor
could not be determined and how this influences decision-making.

The ability to fully implement the Decision Making Ecology was hindered by the amount
of missing data. Specifically, there was a limitation of the data collection instrument and method
and there was a large amount of missing data related to police department and zip code, which
eliminated the possibility of looking at community and organizational level variables. While the
DME is useful for understanding the context of police decision-making in this study, these
missing data points cannot allow for broad interpretation of these findings based on the DME.
While the full utility of the model could not be tested, the Decision Making Ecology still offers an important avenue for future research within this framework. Future research using the DME will be feasible based on lessons learned from this study. Namely, collecting information on organizational and external factors, which is critical to fully implementing the DME, can be achieved by drawing a sample from several specific police departments in different communities, allowing the collection of these variables even if officers are not willing to share them individually. As this study demonstrated the important role of officer perception of risk, it is critical to fully understand the influence of external and organizational factors on the threshold to act and future research will build on this work to include these factors.

C. **Significance & Implications**

There are important implications for social work research and our knowledge about police response to domestic violence based on the findings of this study. The findings of this research are significant for social work, as well as for domestic violence and policing research. This study is the first to use the Decision-Making Ecology from child welfare research to guide a study of police decision-making. While this study was limited in the ability to focus on all aspects of the DME due to missing data and the cross-sectional nature of the study, this is a first attempt at applying this framework and it demonstrates the role of risk assessment in decision-making. Overall, these findings expand the understanding of how officer perception of risk influences arrest decisions. Sparse research has been done on this topic (Perez-Trujillo & Ross, 2008) and more work needs to be done both in how we measure perception of risk and those factors that influence risk perception. First, the measure of perception of risk used here has not been validated in other research settings and there may be other aspects to understanding how to more accurately and precisely measure risk. In doing so, more work can be done to understand
how not only gender, but also race, as well as community level factors, may influence officer perception of risk. Within the framework of the Decision-Making Ecology, this influence of officer perception of risk and race and gender, among other factors, may be acting in a way that may shift an officer threshold to act, beyond legal factors (victim signing a complaint or the presence of an injury) and may be important to understanding police response and bias.

This study lends more to our understanding about the complexity involved in decision-making and reveals the important role that officer perception of future risk in how case factors impact arrest decisions. Future research can improve on this understanding with the incorporation of organizational and external factors. There is great potential in further research of the attribution of risk and how this construct may help us to understand how extralegal factors may influence officer decisions in domestic violence cases. The study of perception of risk can also be expanded to look at other criminal justice system settings such as the court system and sentencing decisions. The findings of the present study and future work on this topic have the potential to guide police training and response to intimate partner violence. Training aimed at bias, as well as officer knowledge about the dynamics of intimate partner violence can be improved based on the findings of this research. While specific training recommendations cannot necessarily be drawn from these findings alone, there are important opportunities to consider the potential for bias related to the sex of the victim. In particular, future work can more specifically examine the potential normalization of female victims and bias against male victims. There are also opportunities to further understand the meaning that officers make of victims signing a complaint. Overall, this research identifies that there are extralegal factors that warrant future research and that there are important opportunities for further understanding officer perception of risk and informal response options.
This research is relevant to informing social work practice, particularly as intimate partner violence is an issue of social justice relevant to the mission of our profession. It is within our responsibility as social workers and social work researchers to examine the impact of systems on our clients and assess ways in which we can work to ameliorate any negative impact. In the context of policing, investigating officer decisions allows us to understand how this decision-making process impacts our clients. This understanding can strengthen our advocacy efforts for our clients, and, along side law enforcement, work to improve how police respond to positively impact both short- and long-term outcomes for survivors.

E. Conclusion

The findings of this study provide a better understanding of the factors that influence officer arrest decisions in domestic violence cases. Specifically, this study elucidates the role of case-related factors and the relationship with officer perception of risk and how, together, these factors influence decisions to act. This research begins to fill the gap of prior research that infrequently considered actual domestic violence cases and lacked theoretical grounding for explaining what and how factors influence arrest decisions. Future research can build upon these findings through incorporating external and organizational variables, as well as by refining measurement of officer perception of risk. By understanding what factors influence police decisions and how they do so, social workers can advocate more effectively, improve training responses, and ultimately imagine alternative responses that can improve short and long-term outcomes for survivors.
CITED LITERATURE


Hirschel, D., & Buzawa, E. S. (2013). The impact of offenders leaving the scene on the police decision to arrest in cases of intimate partner violence. Violence Against Women, 19(9), 1079-1103.


StataCorp. (2015). Stata Statistical Software: Release 12. College Station, TX: StataCorp LP


APPENDICES
Appendix A

Recruitment Script
Police Response to Intimate Partner Violence: Influences on Decision-Making

Hi, my name is Anjali Fulambarker, I am a doctoral candidate at Jane Addams College of Social Work at the University of Illinois at Chicago. I am conducting a research study to understand the factors that may be associated with police action in response to intimate partner violence. Specifically, I am interested in learning about a recent domestic violence call involving intimate partners to which you responded and how these calls were resolved. If you are an active and sworn police officer you are eligible to participate. If you choose to participate I ask that you complete the questionnaire, which asks about the circumstances of the most recent domestic violence call to which you responded, the parties involved, your police agency, and basic demographic information about yourself. I am interested in the most recent domestic violence call with intimate partners to which you responded, regardless of the outcome. This would include cases where you made an arrest, took some form of informal action, or were unable to take any action. The questionnaire will not collect any identifying information about you and all data from this study will be reported in the aggregate. Please read the study information sheet that is included with the questionnaire and if you choose to participate, please complete the survey. If you do not wish to participate or are not eligible to participate, please keep your questionnaire until they are collected and turn in the blank survey. In either case, please turn your survey over when you are ready for it to be collected. Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University, your respective police department, or NEMRT. If you decide to participate, you are free to withdraw at any time without affecting these relationships. Thank you for your consideration and please let me know if you have any questions.
**APPENDIX B**

**STUDY INFORMATION SHEET**

University of Illinois at Chicago
Police Response to Intimate Partner Violence: Influences on Decision-Making

**Why is this research being done?**

You are being asked to participate in this research study to understand factors associated with police action in response to intimate partner violence. Specifically, I am interested in learning about a recent domestic violence call involving intimate partners to which you responded.

**Why am I being asked?**

The study is being conducted by Anjali Fulambarker, a PhD candidate at the University of Illinois at Chicago.

You are being asked to participate in this research because you are enrolled in a North East Multi-Regional Training Center, Inc. (NEMRT) police training course. If you are an active and sworn police officer you are eligible to participate. I ask that you read this form and ask any questions you may have before agreeing to be in the research.

Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Illinois at Chicago, nor will it in any way impact your employment relationship with your respective police department or NEMRT. If you decide to participate, you are free to withdraw at any time without affecting these relationships.

**What procedures are involved?**

If you do choose to participate, you will be asked to complete a one-time questionnaire that will take approximately 20 minutes to complete. This questionnaire will ask you to recall the most recent domestic violence call to which you responded that involved intimate partners and how you resolved this call. The questionnaire includes questions about the circumstances of the call, the parties involved, your police agency, and basic demographic information about yourself. No identifying information will be collected. Approximately 600 police officers from a variety of departments will also be asked to complete this questionnaire.

**What are the potential risks and discomforts and how will they be addressed?**

There is no more risk involved than you would experience in your job or the types of calls that you respond to. A risk of this research is a loss of privacy (revealing to others that you are taking part in this study) or confidentiality (revealing information about you to others to whom you have not given permission to see this information). The risk of breach of confidentiality will be minimized, as no identifying information will be collected. You will not be asked to provide any identifying information either during this consent process or in the questionnaire. Thus, there will be nothing that links your name or other identifying information to the data you provide. I will not report your decision to or not to participate to anyone. Only the research team will have access to the data and all data will be reported in the aggregate. You may skip any questions at any time.
APPENDIX B (continued)

**Are there benefits to taking part in the research?**
There are no direct benefits to you for participating in the study. However, this study will help us better understand your experience in responding to domestic violence calls. Additionally, this study may inform the improvement of police officer response and training.

**What other options are there?**
You may choose not to participate in this research. Your decision to participate or not will in no way affect your employment.

**What about privacy and confidentiality?**
Risks to your confidentiality will be minimized by not collecting any identifying information about you. Additionally, completed questionnaires will be stored in a locked file cabinet and electronic data will be encrypted and password protected. Only the research team will have access to the data and all data will be reported in the aggregate. Other people in this training class may know that you participated in the study.

**Will I be paid for my participation this research?**
You will not be reimbursed or paid for your participation in this study.

**Can I withdraw or be removed from the study?**
You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences. You may also refuse to answer any questions you don’t want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

**Who should I contact if I have questions?**
You may contact the principal investigator, Anjali Fulambarker, PhD candidate at the University of Illinois at Chicago by telephone at 312 996-8504 or by email at afulam2@uic.edu. You may also contact the faculty supervisor overseeing this study, Amy Watson, PhD, Associate Professor at the University of Illinois at Chicago, by telephone at 312 996-0039 or by email at acwatson@uic.edu.

**What are my rights as a research subject?**
If you feel you have not been treated according to the descriptions in this form, or you have any questions about your rights as a research subject, you may call the Office for the Protection of Research Subjects (OPRS) at 312 996-1711 (local) or 1-866-789-6215 (toll-free) or e-mail OPRS at uicirb@uic.edu.

**Remember:** Your participation in this research is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University or your respective police department. If you decide to participate, you are free to withdraw at any time without affecting these relationships.

You may keep this form for your information and to keep for your records.
APPENDIX C

Domestic Violence with Intimate Partners Questionnaire

Are you a sworn and active police officer? □ Yes □ No
If yes, please continue. If no, thank you for your willingness to participate in this research, however, you are not eligible.

Survey Instructions:
This survey is to collect information about a recent domestic call involving intimate partners to which you responded. Please think of the most recent domestic call that you responded to. This call may have been resolved in any of the following ways:
- Arrest: taking a subject into custody in response to any criminal offense.
- No action: no response was required or warranted. This may include cases where you were unable to provide further assistance based upon the circumstances or action was not warranted or relevant.
- Informal action: steps taken to assist a victim or separate parties informally. This may include, but is not limited to: completing a police report, transporting a victim to the hospital or shelter, informing victims about obtaining an order of protection, or asking the suspected perpetrator to leave the scene.

An eligible call involves individuals in an intimate relationship, including current or former partners, married or dating.

Please think about this most recent call and answer the following question based upon the subjects and circumstances involved in this call.

1. Very briefly, describe the situation when you arrived on the scene and/or as described by dispatch:

2. What time of day did this call occur?
   □ midnight – 4:00am □ 4:01am – 8:00am □ 8:01am – noon
   □ 12:01pm – 4:00pm □ 4:01pm – 8:00pm □ 8:01pm – 11:59pm

3. How was the call dispatched?
APPENDIX C (continued)

☐ Domestic Disturbance  ☐ Domestic Battery  ☐ Disturbance  ☐ Mental Disturbance  
☐ On View  ☐ Other, please specify: ____________________________  

4. Who called for assistance?  
☐ Victim  ☐ Perpetrator  ☐ Child  ☐ Other family member  ☐ Neighbor  
☐ Other, please specify: ________________________________  ☐ Unknown  

5. How did you ultimately resolve this call? Please mark all options that apply.  
☐ No action was warranted/relevant to this call  
☐ Informal action was taken to resolve the situation using one or more of the following actions  
  Please indicate which of the informal actions you completed (check all that apply):  
☐ complete a police report  
☐ transport or request transport for the victim to the hospital  
☐ transport victim to shelter  
☐ inform victims about orders of protection  
☐ provide information to the victim about domestic violence resources  
☐ ask the suspected perpetrator to leave the scene  
☐ ask the victim to leave the scene  
☐ other, please specify ________________________________  
☐ Arrest  

6. Why did you choose this response?  
☐ It was mandated by state statute  ☐ Based on my discretion  ☐ Other  ☐ Unknown  

7. Please briefly explain the main reasons why you chose this response.  

8. How much time did you spend on the scene?  
☐ less than 15 minutes  ☐ 15-30 minutes  ☐ 30-60 minutes  ☐ more than one hour  

9. Were you able to identify a primary aggressor?  
☐ Yes  ☐ No  

Party #1: If you were able to identify a primary aggressor, please answer the following questions about the victim. If not, please answer the following question about one of the involved parties (you will answer questions about the other party later).  

10. Please identify whom you are answering this set of questions about:  
☐ the victim (I was able to identify a primary aggressor)  
☐ one involved party (I was not able to identify a primary aggressor)  

11. What was the sex of this person?
APPENDIX C (continued)

☐ Male  ☐ Female  ☐ Other

12. What was the race/ethnicity of this person?
☐ Caucasian ☐ African American ☐ Hispanic/Latino ☐ Asian ☐ Native American ☐ Other

13. What was the age of this person? ____________

14. Did this person report an injury?
☐ Yes  ☐ No

15. Was this person under the influence of drugs or alcohol at the time of the call?
☐ Yes  ☐ No  ☐ Unknown

16. Was a weapon used by this person?
☐ Yes  ☐ No  If yes, please describe weapon________________________

17. Was this person willing to sign a complaint against the other party?
☐ Yes  ☐ No

18. Did this person sign a complaint against the other party?
☐ Yes  ☐ No

19. Please rate each of the following statements about the behavior of this person:
   a. This person displayed combative/assultive behavior
      Not at all    Very little    Somewhat    To a great extent
      1            2              3            4

   b. This person was verbally abusive
      Not at all    Very little    Somewhat    To a great extent
      1            2              3            4

   c. This person was upset/angry/agitated
      Not at all    Very little    Somewhat    To a great extent
      1            2              3            4

   d. This person had a calm demeanor
      Not at all    Very little    Somewhat    To a great extent
      1            2              3            4

Party #2: If you were able to identify a primary aggressor, please answer the following questions about the aggressor/offender. If not, then please answer the following question about other involved party.
APPENDIX C (continued)

20. Please identify whom you are answering this set of questions about:
☐ the aggressor/offender (I was able to identify a primary aggressor)
☐ the other involved party (I was not able to identify a primary aggressor)

21. Was the offender present on the scene when you arrived?
☐ Yes  ☐ No  ☐ unable to determine a primary aggressor/offender

22. Did you attempt to pursue the offender?
☐ Yes  ☐ No  ☐ N/A – the offender was on the scene/remained on the scene
☐ unable to determine a primary aggressor/offender

23. What was the sex of this person?
☐ Male  ☐ Female  ☐ Other

24. What was the race/ethnicity of this person?
☐ Caucasian  ☐ African American  ☐ Hispanic/Latino  ☐ Asian  ☐ Native American  ☐ Other

25. What was the age of this person? ____________

26. Did this person report an injury?
☐ Yes  ☐ No

27. Was a weapon used by this person?
☐ Yes  ☐ No  ☐ If yes, please describe weapon______________________

28. Was this person willing to sign a complaint against the other party?
☐ Yes  ☐ No  ☐ N/A

29. Did this person sign a complaint against the other party?
☐ Yes  ☐ No  ☐ N/A

30. Was this person under the influence of drugs or alcohol at the time of the call?
☐ Yes  ☐ No  ☐ Unknown

31. Please rate each of the following statements about the behavior of this person:
   a. This person displayed combative/assaultive behavior
   Not at all  Very little  Somewhat  To a great extent
   1               2               3               4

   b. This person was verbally abusive
   Not at all  Very little  Somewhat  To a great extent
   1               2               3               4
APPENDIX C (continued)

c. This person was upset/angry/agit ated

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<th>Not at all</th>
<th>Very little</th>
<th>Somewhat</th>
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d. This person had a calm demeanor

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GENERAL INFORMATION: Please answer the following questions about the specific circumstances of the call.

32. What was the relationship between the individuals?
☐ Married  ☐ Dating  ☐ Separated/Divorced/no longer dating  ☐ Other, please specify ________________

33. Were there children present on the scene?
☐ Yes  ☐ No

34. Were there other witnesses present on the scene?
☐ Yes  ☐ No

35. Was an Order of Protection violated?
☐ Yes  ☐ No  ☐ Unknown

36. Have you or your colleagues responded to previous domestic violence calls involving these individuals?
☐ Yes  ☐ No  ☐ Unknown

37. What is the zip code of the location where the call took place? ________________

38. a) Which location best describes where the call took place?
☐ private residence  ☐ place of employment  ☐ street  ☐ business  ☐ other, please specify ________________
   b) If the call took place in a residence or place of employment, whose residence or place of employment was it?
      ☐ Party #1  ☐ Party #2  ☐ Both

39. In your opinion, what is the likelihood of future violence for this couple?
very unlikely  unlikely  possible  likely  almost certain
☐ 2  3  4  5
APPENDIX C (continued)

40. In your opinion, what is likelihood that the police will be called for assistance to this home for domestic violence again in the future?
   very unlikely  unlikely  possible  likely  almost certain
   1             2         3           4       5

41. In your opinion, what is the likelihood of future harm to the victim by the offender?
   very unlikely  unlikely  possible  likely  almost certain
   1             2         3           4       5
   ☐ Not applicable, unable to identify a primary aggressor/victim

42. In your opinion, how effective was the outcome of the call (arrest, no action, informal action) in resolving the immediate situation?
   not at all effective  very effective
   1                   2         3           4       5

43. In your opinion, how effective was the outcome of the call (arrest, no action, informal action) in reducing the risk for future violence?
   not at all effective  very effective
   1                   2         3           4       5

44. In this specific case, what other options or interventions do you wish would have been available?

45. In general, what interventions do you think would be most effective in reducing the risk of future violence in domestic situations?

DEMOGRAPHIC & DEPARTMENT INFORMATION: Please answer the following questions about yourself and your department. A reminder that all the information in this survey will be kept confidential.

46. What is your sex?
   ☐ Male  ☐ Female  ☐ Other
APPENDIX C (continued)

47. What is your race?
☐ Caucasian ☐ African American ☐ Hispanic/Latino ☐ Asian ☐ Native American ☐ Other

48. What is your age? ___________

49. How many years have you been a police officer?
☐ <2 years ☐ 2-5 years ☐ 6-10 years ☐ 11-15 years ☐ 16-20 years ☐ >21 years

50. What is your rank?
☐ Police officer ☐ Police officer – assigned detective to a special unit
☐ Police officer - Field Training Officer ☐ Sergeant ☐ Lieutenant
☐ Other, please specify __________________________

51. Outside of training provided by the police academy, have you attended additional training about domestic violence in the last 5 years?
☐ Yes ☐ No ☐ Unknown

52. What police department do you work for? __________________________________________

53. What type of policy does your department have regarding arrest in domestic violence calls?
☐ Mandated arrest ☐ Preferred arrest ☐ No policy ☐ Unknown

54. Does your department have a policy that mandates that you take any other actions in domestic violence calls?
☐ Yes ☐ No ☐ Unknown
If yes, what are these actions? ________________________________

55. Do you find these policies to be helpful? Why or why not? If your department does not have a policy, do you think that the department should have one? Why or why not?

Please indicate to what extent you agree or disagree with the following statements:
56. My chief thinks that domestic violence enforcement is a department priority
   Strongly Disagree 1 2 3 Strongly Agree 4

57. My immediate supervisor thinks that domestic violence enforcement is a department priority
   Strongly Disagree 1 2 3 Strongly Agree 4
APPENDIX D

UNIVERSITY OF ILLINOIS
AT CHICAGO

Office for the Protection of Research Subjects (OPRS)
Office of the Vice Chancellor for Research (MC 672)
203 Administrative Office Building
1737 West Polk Street
Chicago, Illinois 60612-7327

Approval Notice
Initial Review (Response To Modifications)

March 30, 2015

Anjali Fulambarker
Jane Addams School of Social Work
1040 W Harrison
M/C 309
Chicago, IL 60612
Phone: (847) 530-0240

RE: Protocol # 2015-0319
“Police Response to Intimate Partner Violence: Influences on Decision-Making”

Dear Ms. Fulambarker:

Your Initial Review (Response To Modifications) was reviewed and approved by the Expedited review process on March 26, 2015. You may now begin your research.

Please note the following information about your approved research protocol:

Protocol Approval Period: March 26, 2015 - March 25, 2016
Approved Subject Enrollment #: 600
Additional Determinations for Research Involving Minors: These determinations have not been made for this study since it has not been approved for enrollment of minors.
Performance Sites: UIC, North East Multi-Regional Training, Inc (NEMRT)
Sponsor: None
PAF#: Not applicable
Research Protocol(s):
   a) Police Response to Intimate Partner Violence (no footer)

Recruitment Material(s):
   a) Recruitment; Version 2; 03/17/2015
   b) Pilot Recruitment; Version 2; 03/17/2015

Informed Consent(s):
   a) Info Sheet; Version 2; 03/17/2015
   b) A waiver of documentation of consent has been granted under 45 CFR 46.117 for all of the research; minimal risk; subjects will be provided with an information sheet containing all of the elements of consent.
APPENDIX D (continued)

Your research meets the criteria for expedited review as defined in 45 CFR 46.110(b)(1) under the following specific category(ies):

(7) Research on individual or group characteristics or behavior (including but not limited to research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Please note the Review History of this submission:

<table>
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<th>Receipt Date</th>
<th>Submission Type</th>
<th>Review Process</th>
<th>Review Date</th>
<th>Review Action</th>
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<tr>
<td>03/11/2015</td>
<td>Initial Review</td>
<td>Expedited</td>
<td>03/15/2015</td>
<td>Modifications Required</td>
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<td>03/20/2015</td>
<td>Response To Modifications</td>
<td>Expedited</td>
<td>03/26/2015</td>
<td>Approved</td>
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</table>

Please remember to:

⁻ Use your research protocol number (2015-0319) on any documents or correspondence with the IRB concerning your research protocol.
⁻ Review and comply with all requirements on the enclosure.

"UIC Investigator Responsibilities, Protection of Human Research Subjects"
(http://rigger.uic.edu/depts/oerc/research/protocolreview/irb/policies/0924.pdf)

Please note that the UIC IRB has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Please be aware that if the scope of work in the grant/project changes, the protocol must be amended and approved by the UIC IRB before the initiation of the change.

We wish you the best as you conduct your research. If you have any questions or need further help, please contact OPRS at (312) 996-1711 or me at (312) 355-0816. Please send any correspondence about this protocol to OPRS at 203 AOB, M/C 672.

Sincerely,

Alison Santiago, MSW, MJ
IRB Coordinator, IRB # 2
Office for the Protection of Research Subjects

Enclosure(s):

1. UIC Investigator Responsibilities, Protection of Human Research Subjects
2. Informed Consent Document(s):
   a) Info Sheet; Version 2; 03/17/2015
3. Recruiting Material(s):
   a) Recruitment; Version 2; 03/17/2015
   b) Pilot Recruitment; Version 2; 03/17/2015

cc: Creasie Hairston, Jane Addams School of Social Work, M/C 309
    Amy Watson (faculty Sponsor), Jane Addams School of Social Work, M/C 309
February 23, 2016
Donald J. Baumann
Saint Edwards University
3001 South Congress
Austin, TX 78704

Dear Dr. Baumann,

I am writing to request permission to use the following material from your publication, The Decision-Making Ecology (Baumann, Dalgleish, Fluke, & Kern, 2011) in my thesis.

Specifically, I am seeking permission to use Figure 1, The Decision-Making Ecology (p. 5) and Figure 3, A General Model for Assessing the Situation and Deciding what to do about it (p. 7) using the citation as listed above. This material will appear as originally published.

Thank you for your kind consideration of this request.

Sincerely,

[Signature]

Anjali J. Fulambarker

The above request is approved.

Approved by: [Signature] Date: 2/23/16
VITA
Anjali J. Fulambarker

EDUCATION
B.A., Women & Gender Studies, Washington University in St. Louis
M.S.W., Washington University in St. Louis
Graduate Certificate, Nonprofit Management & Leadership, University of Missouri, St. Louis
Ph.D., Social Work, University of Illinois at Chicago

PUBLICATIONS


CONFERENCE PRESENTATIONS


**TEACHING EXPERIENCE**

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<th>2014-2016</th>
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<td>Jane Addams College Social Work, MSW Program</td>
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**HONORS/AWARDS**

| Fellow | Diversifying Faculty in Illinois, Illinois Board of Higher Education |