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Needs Assessment for Animal-Assisted Interventions: Factors Influencing  
Implementation of Dogs as Judiciary Aids in Criminal Justice Processes in CPS Cases.

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A Dissertation

Presented to

the Faculty of the Graduate School of Social Work

University of Denver

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In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

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by

Maureen MacNamara

August 2013

Advisor: Marian Bussey, Ph.D.

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Author: Maureen A. MacNamara  
Title: Needs Assessment for Animal-Assisted Interventions: Factors Influencing Implementation of Dogs as Judiciary Aids in Criminal Justice Processes in CPS Cases.  
Advisor: Marian Bussey, Ph.D.  
Degree Date: August, 2013

### **Abstract**

The study presents findings from a needs assessment exploring the critical features or core elements that bear on professionals regarding the inclusion of dogs as judiciary aides in the investigation and prosecution of child maltreatment cases. Specifically, the objectives of the current needs assessment were examined through the following questions: (1) What are the *perceived* benefits of implementing programs with dogs as judiciary aids throughout criminal justice? (2) What specific roles do professionals identify for dogs within criminal justice, (3) What are potential barriers to the implementation of dogs as judiciary aids programs, and (4) How are the needs and expectations of agencies considering incorporating dogs similar to or different from those agencies that are currently incorporating dogs.

The study identified a number of differences in the identified roles, barriers, and important factors reported by survey respondents. Quantitative analysis of responses regarding the role of dogs in the criminal justice setting revealed professionals identified roles for dogs that matched their particular scope of influence. Moreover, qualitative findings provided additional insight into participant's concerns and convictions and their varying perceptions of factors central to the inclusion of dogs in criminal justice processes for child maltreatment. The study relies heavily on qualitative responses of participants. Implications are discussed with regard to micro and macro levels of social work practice and the field of implementation research.

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## **Chapter One: Introduction**

### **Child maltreatment**

Child maltreatment is one of the Nation's most serious concerns. In any given year, perhaps six million American children, ages newborn to 18 years old, come to the attention of the child welfare system for maltreatment and almost **five children die every day** as a result of maltreatment. The National Incidence Study (NIS-4) reported that, according to the Endangerment Standard for harm, nearly 3 million children (an estimated 2,905,800) experienced maltreatment during the 2005–2006 study year (Sedlak, Mettenburg, Basena, Petta, McPherson et al. 2010). This corresponds to one child in every 25 in the United States experiencing some form of maltreatment. While more than three-fourths (77%, an estimated 2,251,600 children) were neglected, an estimated 835,000 children (29%) were abused. Most abused children (57%, or 476,600 children) were physically abused, more than one-third (36%, or 302,600 children) were emotionally abused, and nearly one-fourth (22%, or 180,500 children) were sexually abused. In the NIS classifications, abuse includes physical abuse, sexual abuse, and emotional abuse. Neglect includes physical neglect, emotional neglect, and educational neglect. In the literature, and for the purposes of this study, the term child maltreatment is used to encompass both abuse and neglect as most abused children experience multiple forms of maltreatment (Gurland, & Grolink, 2003; Higgins & McCabe, 2000; Hussey, 2006).

The Child Abuse Prevention and Treatment Act (CAPTA) (42 U.S.C. §5101), as amended by the CAPTA Reauthorization Act of 2010 requires a collaborative response to child maltreatment by child welfare, law enforcement, and criminal justice agencies (Adams, 2010). A notable example of such collaboration has been the implementation of multidisciplinary teams consisting of personnel from law enforcement, social services, medical staff and the judiciary which conduct investigations of alleged child maltreatment in many communities (Davies, Cole, Albertella, Allen, & Kekevia, 1996). The multilevel considerations that ensue from a report of suspected child maltreatment to prosecution and conviction are complex, and yet development of criminal justice processes and practices have not been data driven. For example, despite decades of interest, the effect of police and CPS co-involvement has been limited, both in the number of studies conducted and the sophistication of the methodology employed—a significant gap given its importance and frequency (Cross, Finkelhor & Ormrod, 2005).

Research conducted over the past several decades indicates that of the 60 percent (61.7%) of referrals of all forms of child maltreatment that were screened in for investigation or assessment by Child Protective Services (CPS) agencies, a third of the reports were found to be “substantiated,” leaving about 60% “unsubstantiated” (Hussey, 2006). In order to determine whether a child has been maltreated (or is in imminent risk of maltreatment) an investigative interview is conducted “to elicit as complete and accurate a report from the alleged child or adolescent victim as possible in order to determine whether the child or adolescent has been abused (or is in imminent risk of abuse) and, if so, by whom” (APSAC, 2002, p. 2). Moreover, a child's disclosure is often critical to ensure the protection of innocent individuals and the conviction of perpetrators.

Therefore, skillful forensic interviews are important as bad interviewing can lead to serious consequences such as eliciting false allegations, putting children and families through unnecessary stress, decreasing a child victim's credibility in court, contaminating facts, reducing probability of conviction, draining resources through unsuccessful trials and investigations, and reducing resources available for legitimate maltreatment cases (Wood & Garven, 2000). For example, studies reveal that more than a third of suspected victims do not report abuse when formally interviewed in investigative contexts, even when there is clear evidence that they were in fact abused (Herschkowitz, Fisher, Lamb, & Horowitz, 2007; Rogosch, Dackis, & Cicchetti, 2011) and that a substantial minority are distressed by the process (Henry, 1997).

Personnel making up the multidisciplinary system response to child maltreatment evince a substantial commitment to the wellbeing of children which often fosters increasing experimentation and common action to develop better methods. For example, although there exists an extensive literature focused on questioning techniques, child maltreatment investigation teams acknowledge that much more work remains to be done to understand the means by which abused children who are distressed about their experience can best be accommodated within the adult-centric criminal justice system (Herschkowitz, Fisher, Lamb, & Horowitz, 2007; Pipe, Lamb, Orbach, & Cederborg, 2007). Continued cooperation between society's effort to protect children and its effort to bring perpetrators to justice are needed to fully address the significant problem of child maltreatment.

One practice increasingly offered by child advocates is the inclusion of specially selected dogs as 'comfort items' or 'judiciary aides', in cases involving children victims

and witnesses (Hart-Cohen, 2009; Justice, 2007). These advocates have identified several situations where specially selected dogs might be incorporated into the criminal justice process: greeting children (at a children's advocacy center, prosecutor's office, or other agency location), during the forensic interview or evaluation, during the medical examination, or later for court preparation and courtroom testimony (Justice, 2007; Phillips & McQuarrie, 2007). The broad observation that animals hold a special appeal for children and youth, along with findings from recent studies reporting that the presence of companion animals may serve as sources of comfort and security (Melson, 2007; Kruger & Serpell, 2006), and as catalysts for interpersonal interaction and communication (Bardill & Hutchinson, 1997, Levinson, 1969), has been interpreted as suggesting that the inclusion of dogs during the criminal justice process could have considerable impact on child maltreatment outcomes. An example of such evidence was reported by Melson and Schwartz (1994) who found that 42% of five year old children spontaneously mentioned their pets when asked, "Who do you turn to when you are feeling sad, angry, happy, or wanting to share a secret?" However, the claim that the inclusion of a specially selected dog during maltreatment case processes can provide the victim with emotional support, improve rapport with the investigative interviewer, or potentially influence court proceedings has not been studied empirically. This study examines implementation of dogs as judiciary aids from multiple perspectives to better understand what factors contribute to effective implementation.

It is, therefore, the purpose of this study to explore the critical features or core elements that bear on professionals regarding the inclusion of dogs as judiciary aides in the investigation and prosecution of child maltreatment cases. Specifically, the objectives

of the current innovation implementation study are examined through the following questions: (1) What are the perceived benefits of implementing programs with dogs as judiciary aids throughout criminal justice? (2) What specific roles do professionals identify for dogs within criminal justice? (3) What are potential barriers to the implementation of dogs as judiciary aids programs? and (4) How do the concerns and perspectives of agencies considering incorporating dogs vary from those agencies that are currently incorporating dogs?

Both the diffusion of innovation literature (Yoo, Brooks, & Patti, 2007) and the socio-technical models of technologic implementation (Crea, Crampton, Abramson-Madden, & Usher, 2008) suggest that successful adoption and implementation of any innovation or new technology is a function of both micro- and macro-level considerations (Fixsen, Blasé, Naoom, & Wallace, 2009; Henry, Richardson, Black-Pond, Sloane, Atchinson, & Hyter, 2010). That is, the social context of an organization, as well as organizational policies and processes, helps to determine what types of innovations will be chosen, how these innovations will be implemented, the way decisions will be made, and how problems will be solved. Shortcomings in the innovation implementation process will make it impossible to determine an innovation's intrinsic effectiveness (Hemmelgarn, Glisson, & James, 2006; Glisson & James, 2002). Thus, it is first important to understand those factors by which this new practice can best be integrated into existing criminal justice processes as there is much anecdotal information about potential benefits for including dogs in criminal justice child protective service (CPS) cases, but to date, we know of no systematic observation, interview, or other data

collection research that has examined the challenges to implementation of this new practice.

### **Significance of this study**

A substantial body of research has consistently reported that abuse is associated with significant adverse effects on children's physical, mental, and emotional development and adjustment including impairment of healthy brain development (Cicchetti, 2002; Widom, DuMont, & Czaja, 2007); lowered IQ (Jaffee & Maikovich-Fong, 2011); and poorer long-term health outcomes (Rogosch et al., 2011). Maladaptive functioning associated with child maltreatment is not simply related to negative behavioral outcomes at particular points in time, but with a persistent pattern of behavioral dysfunction which grows more pronounced over time (Garmezy, 1985; Trickett, Kim, & Prindle, 2011). Mental health problems associated with maltreatment includes depression, and anxiety (Perkins & Jones, 2004; Perkins, Luster, & Jank, 2002); eating disorders (Rich, Gidycz, Warkentin, Loh, & Weiland, 2005); posttraumatic stress disorder (Cicchetti, 1989; Cicchetti & Valentino, 2006; Vranceanu, Hobfoll, & Johnson, 2007) as well as behavioral problems such as aggressive behavior, social withdrawal, self-injury, substance abuse, impaired interpersonal trust and affective instability (Cohen, Brown, & Smaile, 2001; Fantuzzo, Perlman, and Dobbins, 2011); adolescent dating violence and engagement in sexual activity (Maniglio, 2009; Thompson & Tabone, 2010).

Above and beyond the dire effects of child maltreatment on children's developmental course a study conducted by the Center for Disease Control (CDC) reports that, for the U. S., the cost of child maltreatment in 2008 is approximately \$124 billion

over the victims' lifetimes include childhood health care costs; adult medical costs; productivity losses; child welfare costs; criminal justice costs; and special education costs (DePanfilis, Dubowitz, & Kunz, 2008). According to the findings the financial burden of child abuse is just as high or higher than that of costly health conditions, including stroke and Type 2 diabetes.

Given the long term consequences of abuse for both the child and society, the optimal assessment of suspected child maltreatment and subsequent prosecution is a multidisciplinary endeavor, often led by forensic social workers in collaboration with other agencies (Neighbors, Chambers, Levin, Nordman, & Tutrone, 2002). The fact that child maltreatment intersects with criminal prosecution requires coordinated multidisciplinary and multi-agency work (Glaser, 2005). The interdependence of these agencies requires program developers to consider multiple domains, including the context and values driving the structure of the program operations, including the prevailing gatekeeping processes (Jaskyte & Dressler, 2005). Therefore, prior to implementing changes in criminal justice processes, it is crucial to understand the policy, programmatic, and organizational context within which such services fit. Furthermore, an organization's social context affects whether new core technologies (of which dogs as judiciary aids are an example) are adopted, how they are implemented, and whether they are sustained and effective (Hemmelgarn et al., 2006).

To date, advocates for the inclusion of dogs in criminal justice CPS cases have inferred a variety of benefits resulting from the presence of a companion animal based on anecdotes or on findings in the literature that vary greatly in subject samples, interventions, outcomes, procedures, and instruments (O'Neill-Stephens, 2009).

However, these findings may not generalize to the context of criminal justice settings encountered in child maltreatment cases. While new areas of support such as the use of dogs as judiciary aids are gaining increased attention in judicial system efforts to respond to the needs of children, including dogs is not a precise science. In the eyes of the law, the innovation is not quantitative or experimentally verified. Thus, it remains for those advocates involved in legal proceedings to prove that the potential benefits gained by the inclusion of dogs outweighs the potential prejudicial effect (Genser, 2008).

Once seen as a radical idea, the use of companion animals in criminal justice processes for child maltreatment cases is a practice that is being rapidly implemented around the nation (Phillips, 2010; Genser, 2008). Furthermore, the National District Attorneys Association recently endorsed the use of 'Courthouse' or 'Comfort' dogs to aid in the investigation of crimes involving young or vulnerable victims (National District Attorneys Association, 2011) despite the dearth of evidence demonstrating the influence of companion animals on the course of forensic investigations. Additionally, a number of states (i.e., Maryland, Texas, Georgia, Montana, and Florida) currently incorporate dogs in the forensic investigation to help interview fragile victims, especially children (Dellinger, 2007) although there is disagreement as to issues of confidentiality and interview protocols. Because the majority of dogs included in human service programs incorporate personal pets that belong to volunteers (MacNamara & Butler, 2010) some authors have questioned the appropriateness of including volunteer animal/handler teams in criminal justice processes, arguing that, in order to ensure privacy and confidentiality, dogs should be handled by criminal justice staff (O'Neill-Stephens, 2009). However, these and other implementation aspects have not been explored empirically.



Given the historical and ongoing connection between social work and criminal justice, as well as the professional mandate to advocate for social justice and equality for vulnerable and oppressed populations, the social work profession has a responsibility to explore the potential benefits of new technologies to families and children. Therefore, the proposed research questions explore a needs assessment for including dogs as judiciary aids in criminal justice for child maltreatment cases; particularly what is important to service providers and what are the barriers to this innovative practice.

## **Chapter Two: Literature Review**

### **Criminal justice response to child maltreatment**

In the 1980s and early 1990s reporting of child maltreatment allegations increased dramatically across the United States subsequent to the enactment of mandatory reporting statutes (Paine & Hanson, 2002) combined with extensive media attention to two highly charged cases, the Kelly Michaels case (Butler et al., 2001) and the McMartin preschool trials (People v. Buckey, 1990). The McMartin and Michaels cases were significant from the perspective of both social science and the law. Not only did these two cases stimulate widespread interest among social researchers regarding the techniques used to interview children, and the credibility of child witnesses, but their legal outcomes also affected the fate of similar prosecutions throughout the United States. Comparable “daycare abuse” cases as well as singular abuse cases investigated within the same law enforcement and child welfare systems came to be viewed with widespread skepticism, so that legal prosecutions of child maltreatment cases became rare (Nathan & Snedeker, 1995; Schreiber, Bellah, Martinez, McLaurin, Strok et al., 2006).

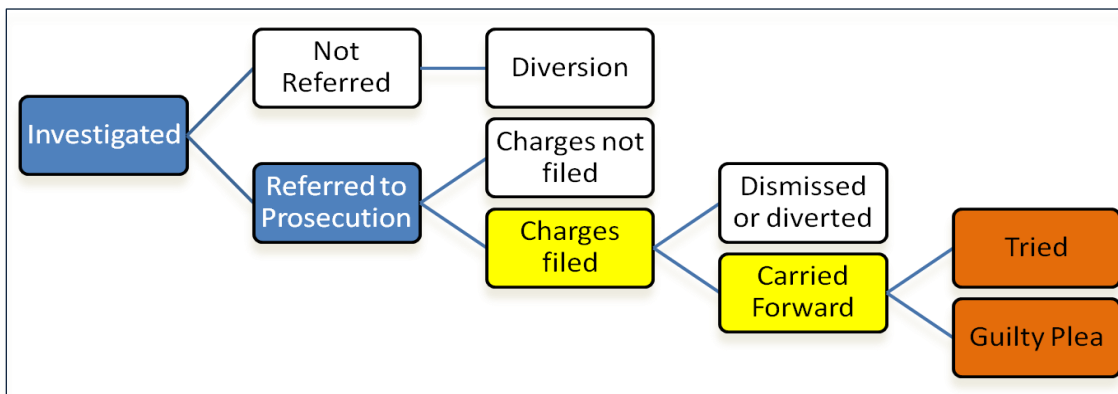
The McMartin and Michaels cases illuminated the disparate goals and lack of coordination between the many societal systems charged with the investigation and subsequent interventions in child maltreatment: child protective services (CPS), law enforcement, and criminal courts. The majority of criticisms were focused on the highly legalistic and adversarial procedures that lacked processes reflective of a more holistic

approach. More specifically, it was recognized that the lack of a coordinated response led to serious consequences such as eliciting false allegations, putting children and families through unnecessary stress, decreasing a child victim's credibility in court, contaminating facts, reducing probability of conviction, draining resources through unsuccessful trials and investigations, and reducing resources available for legitimate maltreatment cases (Pipe et al., 2007; Wood & Garven, 2000).

In response to the intense scrutiny by social critics, researchers, and human service providers, procedures for investigating and subsequently prosecuting allegations of child maltreatment have undergone considerable changes, resulting in a forensic process that is more child-centered (Ellett & Steib, 2005). For example, most states have legislation requiring law enforcement and CPS to coordinate child maltreatment investigations (Jones, Cross, Walsh, & Simone, 2007). In these states forensic interviews are more likely to be conducted in child-friendly settings that are free from visual and auditory distractions, contain child centered furnishings (Cross, Jones, Walsh, Simone, & Kolko, 2007; Jones et al., 2007; Lippert, Cross, Jones, Walsh, 2008), and the appearance of forensic interviewers themselves is non-threatening (i.e. street clothes rather than police uniforms or special female child interviewers) (Pangborn, 2008). However, because of the difficulties of trying such cases and concerns about children and families, considerable challenges continue to surround the criminal justice response to child maltreatment (Cross, Walsh, Simone, & Jones, 2003).

The path(s) a particular case takes spans multiple domains and requires coordinated multidisciplinary and multi-agency work (Glaser & Strauss, 2005) (See

Figure 1. adapted from Cross, 2012). Each system: child protective services (CPS), law enforcement, civil courts, and criminal courts; has its own goals and procedures (Henry, 1997). While interprofessional collaboration has been mandated within the criminal justice system for child maltreatment cases, there are tensions between the different professional traditions, and the methods, experience, and beliefs that arise from the nature of each institution (Dunworth 2007; Walsh, Jones, Cross, & Lippert, 2010).



*Figure 1: Prosecution Case Flow, (Cross, 2012).*

### **Investigation of child maltreatment**

Two different investigative agencies, police and child protective services (CPS), regularly refer child abuse cases to prosecutors, whereas only the police refer most other crimes. One or both of these agencies will be involved in all official child abuse investigations, either because private citizens contact them directly or professionals such as health care providers and school personnel contact them following detection, disclosure, or suspicion of abuse. CPS and law enforcement investigations are alike in some ways but very different in others (Winterfeld & Sakagawa, Bollenbacher, Murphy, McDaniel, Rainey, & Plummer, 2003). Both types of investigators seek to learn the truth about allegations and, broadly, are concerned with protecting children. But police are

looking for evidence of a specific crime that could lead to an arrest, whereas CPS investigators are assessing the child's safety in the caretaking environment and making certain that adequate plans are made for children to live in a safe environment.

A primary complaint about the traditional response to child maltreatment has been that multiple agencies fail to collaborate – not sharing information and not coordinating their decision-making and communication with the family. In child protection work, better collaboration between professionals has consistently emerged in the literature as a method of ensuring better services for children and families (Staller & Faller, 2010). The Child Abuse Prevention and Treatment Act (CAPTA) (42 U.S.C. §5101), as amended by the CAPTA Reauthorization Act of 2010, mandates state laws requiring child protection services (CPS) and law enforcement co-involvement. To ensure appropriate involvement, most states have legislation requiring cross reporting of allegations between CPS and law enforcement (Jones, Cross, & Simone, 2007; Vieth, Tiapula, Knox, Canaff, 2002). However, the wording of the majority of these statutes is vague and leaves considerable room for interpretation, and it is unclear how they are being implemented. While individual programs and centers have developed their own policies, there are no national standards or policies for CPS and law enforcement co-involvement.

In response to legislative mandates some communities have developed joint investigation protocols, others have formed multidisciplinary investigations teams (MDTs), or created child advocacy centers (CACs). If they work jointly, local CPS and law enforcement agencies create a memorandum of understanding specifying coordination methods (DePanfilis & Salus, 2006). The memorandum is guided in part by

state statute and policy and typically details how the two agencies initiate and share maltreatment reports with each other, details joint investigation procedures, and identifies which oral and written information will be shared.

In communities that use MDTs protocols and procedures are developed to define how law enforcement and CPS enjoin other professionals to respond to allegations of child maltreatment (Jones et al. 2007). In MDTs, multiple professionals work together to guide the investigation, avoid duplicate interviewing, and collaborate on decision making (Pence & Wilson, 1994, Sheppard, Zangrillo, & Police Foundation, 1996). Medical personnel, victim witness advocates, mental health workers, and prosecutors may also work together with law enforcement and CPS on MDTs. A primary responsibility of MDTs is the team interview, which is designed to eliminate the need for separate investigators to subject the child to multiple, redundant interviews. Many MDTs have a process of team case review after the initial investigative interview. Law enforcement, CPS, assistant district attorney, medical professionals, victim witness advocates, and other professionals meet to review evidence, discuss prosecution and child protection decisions, plan referrals to services, and coordinate their communication with families. Most teams try to foster a collaborative process in which each professional benefits from the ideas and experience of their team members while still reserving final decision-making power in their particular domain.

A growing number of communities have responded to mandates for co-involvement by the creation of child advocacy centers (CACs). Children's advocacy centers are organizationally distinct programs located within other organizations (e.g.,

district attorney's offices, hospitals) or existing as independent nonprofit centers (Jones et al., 2007). The national member organization of CACs has grown from 22 in 1992 to over 650 accredited or associate centers in 2007 (National Children's Alliance, 2007). They provide coordinated investigations and MDTs, as described above, but must also meet an array of standards for quality of investigations, medical and mental health care involvement, victim support and advocacy, and culturally competent services. In some CACs (e.g., in Brooklyn, Chicago, Dallas, Huntsville, and Phoenix), individual investigators or investigative units of CPS and police are co-located at the CAC to facilitate coordination.

While sources argue that coordination of law enforcement and CPS improves investigations and benefits children and families, heretofore there has been scant research on the effectiveness of these innovations. Results have been inconsistent as several reports have delineated the positive impacts of co-involvement of police and child protection workers (Winterfeld et al., 2003) while others did not find any advantage in legal or CPS outcomes when they compared communities by their degree of coordination of investigations (Tjaden & Anhalt, 1994). In one of the few studies of criminal investigation rates Cross, Finkelhor and Ormrod (2005) used data from the National Survey of Child and Adolescent Well-Being (NSCAW, 1997-2013)—a large, nationally representative sample of child maltreatment investigations— to compare CPS cases with and without police involvement. Analysis revealed that a criminal investigation was initiated in only 21% of reported CPS cases and that communities varied greatly in rate of criminal investigation. The authors reported that this variance was associated with the

existence of policies and structures specifying methods of conducting investigations and the activities of each agency, with higher investigation rates occurring in communities where these structures existed. Compared to national data, these findings revealed that child maltreatment was less likely to lead to filing charges and incarceration than most other felonies.

In a study examining the impact of MDTs and CACs on criminal justice outcomes, Cross, et al. (2007) used a sample of 1,069 child maltreatment cases to compare data on forensic interviewing from four CACs to case data from within-state comparison communities that lacked CACs. Analysis of the data found no systematic difference in the charging rates of child maltreatment cases between those investigated by MDTs or CACs to those non-CAC investigations. Furthermore, CACs showed no advantage on reducing the number of forensic interviews, which was consistently small across the sample.

The authors reported that some comparison communities used joint investigations and case review at levels that rivaled or exceeded that of the CACs with which they were paired. The authors found that any charging rate increases were dependant on the specific program, and one-fourth or more of cases in two of the CACs lacked any formal coordination. The authors suggested that more information is needed to develop a comprehensive referral protocol and there is also a need to develop more detailed and concrete standards for coordination.

Although the mission of CACs is to offer a seamless continuum of service to families where there is a report of suspected child maltreatment and by doing so, decrease



trauma experienced by child victims (Wolfteich, & Loggins, 2007), at this point, very little empirical research exists supporting the effectiveness of CACs on client outcomes. For example, Lippert et al. (2009) used the data from the Cross et al. (2007) study to examine 987 CPS cases in which children fully disclosed abuse when interviewed in comparison to cases of children believed to be victims who gave no or partial disclosures. Data revealed that although communities differed on disclosure rate, no difference in the rate of children's disclosure of maltreatment was associated with having a CAC.

Relatedly, Jones et al. (2007) used a self-report questionnaire to explore caregiver satisfaction with maltreatment investigations. Caregivers (n=229) were generally more satisfied with CAC investigations than non-CAC investigations and most were satisfied with the medical examination process, with no difference between CAC and comparison samples. However, the child's level of internalizing problems also predicted satisfaction; the less troubled the child, the more satisfied the caregiver was with the investigation, regardless of venue. In addition, caregivers reported higher satisfaction ratings when investigators believed maltreatment had occurred and CPS substantiated the case.

In contrast, the only difference found for children (n=65) was that they reported feeling "very scared" during the investigative interview and worse after talking with investigators if they were interviewed at a non-CAC site than at a CAC. Moreover, the researchers point out that approximately a quarter of the sample was dissatisfied with the investigation, regardless of site and that one-third of the children said they had to explain things too many times. Jones et al. (2007) suggest that the lack of differences in child satisfaction rating between CACs and comparison sites may signal that, from a child's

perspective, a CAC investigation may not seem better than an ordinary CPS/law enforcement investigation.

The lack of difference between the CACs and MDTs in client and legal outcomes suggests that it is the interagency coordination, rather than anything unique to CACs that may lead to improved outcomes for children and families. The CAC model shows promise for improving families' experiences and caregiver satisfaction with investigations in particular. However, it remains to be seen which specific components of the CAC model improve caregiver satisfaction. The lack of significant evidence that CACs improve children's satisfaction with investigations suggests that more work is still needed by the field to determine how professionals can best meet children's needs during investigations. CACs and other multidisciplinary programs will need to use feedback from current and future research to further refine and improve services.

In summary, the legislative directive to develop a coordinated response to the investigation of child maltreatment has resulted in a number of different efforts; co-involved agencies, MDTs, and CACs which vary in the services they offer and their structures for service delivery. Research on the effectiveness of these initiatives is limited and illustrates the innovation implementation difficulties encountered in complex environments (i.e. CACs became an institution before there was evidence for their efficacy). In a commentary, Faller and Palusci (2007) observed that the lack of empirical support for child welfare innovations is fairly typical of how the child welfare system operates. The authors wrote, "Professionals, desperate to adopt better ways to help

victims of child maltreatment, often implement interventions without a prior evaluation or an evaluation component" (p. 1023).

### **Methods for interviewing children**

The forensic evaluation or investigative interview is defined as a professional interview designed to assess or evaluate the truth about a suspicion of child maltreatment (as well as identify the who, what, where, and when of the abuse) (Lippert et al., 2009). Investigative interviews are different from general clinical evaluations that are conducted for treatment assessment or for other purposes as general evaluations are usually brief, informally prepared, and for the purpose of planning a course of treatment. For the most part, general evaluations are for the exclusive use of the clinician and are highly confidential (Babitsky & Mangraviti, 2002; Righthand, Kerr, & Drach, 2003). Investigative interviews are focused on a specific legal question that must be addressed by a court. The interview is lengthy, formally prepared, must be internally and externally accurate, is submitted to a number of parties (lawyers, judges, clients, agencies), and may become public information if entered as part of a hearing record. In some cases the interviews of children will be kept confidential and can be sealed by the court (APSAC, 2002; Carnes, 2000; National Children's Advocacy Center, 2005; NASW, 2005, section 1.07j).

Studies of forensic records reveal that 50% or more of suspected child maltreatment cases lack physical signs, and when these are found they are rarely conclusive proof of abuse (Rogosch et al., 2011). Frequently the only evidence in child maltreatment cases is the child's statement. Therefore, a child's disclosure during a

forensic interview is often critical to ensure the protection of innocent individuals and the conviction of perpetrators. In the United States, the quality of forensic interviews is most likely to be assessed by the courts when they judge the admissibility of child interviews. Courts consider the “reliability” of child interviews based on the extent to which the children’s statements are “spontaneous” and not the result of “extensive or coercive questioning” (Myers, 2008). However, children may refuse to testify or retract earlier disclosure, and families may oppose prosecution.

In the 1980s, reporting of child maltreatment allegations increased dramatically subsequent to the enactment of mandatory reporting statutes, bringing with it intense criticism of traditional methods for interviewing children (Paine & Hanson, 2002). The majority of criticisms were focused in two main areas; that the methods for interviewing children were ineffective in assessing the truth (Cronch, Viljoen, & Hansen, 2006; Henry, 1997), and, more specifically, that intrusive and confrontational interviewer behaviors were unnecessarily stressful and potentially emotionally traumatic for children and families (Britton, 1998; Bruck, Ceci, & Hembrook, 1998; Weiss & Berg, 1982). As a result, the role of the investigative child interviewer has been the subject of intense scrutiny and has increasingly required specific training and expertise (Myers, 2010; Patterson & Pipe, 2009).

Research in the area has sought to identify factors for the conduct of interviews such that the likelihood of a child's disclosure is increased (Adams, 1994; Poole & Lamb, 1998). From this research, interviewing guidelines such as those set by the American Professional Society on the Abuse of Children (APSAC) as optimal practice in child

maltreatment investigations recommend that the interviewer establish rapport with the child before turning attention to the possible abuse (APSAC, 2002). Saywitz and Campo (1998) identified evidence-based rapport-building methods used in clinical contexts such as engaging children in discussions of innocuous topics such as favorite foods or television shows and avoidance of sensitive topics, like family members.

Numerous interviewing techniques have received attention in the literature (Cronch et al., 2006), however, Lamb, Orbach, Hershkowitz, Esplin, and Horowitz (2007) reported on extensive research supporting the conclusion that the National Institute of Child Health and Human Development (NICHD) Protocol, published in 2000, was a valid and reliable method for interviewing children. In an investigation of the differences between interviewer behavior before and after training in the use of the NICHD Protocol, Lamb and Orbach (2001) compared 55 protocol interviews with 50 prior interviews by the same investigators. Analysis of the investigators' utterance types, distribution, and timing, as well as quantitative and qualitative characteristics of the information produced revealed that protocol interviews contained more open-ended prompts overall than non-protocol interviews did. In addition, data revealed that more details were obtained using open-ended invitations and fewer were obtained using focused questions in protocol interviews than in non-protocol interviews. These findings support the use of NICHD protocols over other interviewing methods.

The NICHD Protocol is comprised of specific and concrete guidelines that forensic interviewers can follow (Orbach, Hershkowitz, Lamb, Esplin, & Horowitz, 2000). It begins with an introduction, truth–lie discussion, and establishment of ground

rules for the interview. Next, the interviewer focuses on building rapport and asks the child to describe a neutral event. The interviewer then transitions into the abuse-specific questioning by asking the child to describe why they are being interviewed. The interviewer is instructed to use non-suggestive invitations and open-ended questions as much as possible, followed by focused non-suggestive questions and option-posing questions if necessary (Lamb et al., 2007).

The rapport-building phase that follows the introductory phase comprises two sections. The first is designed to create a relaxed, supportive environment for children and to establish rapport between children and interviewer. In the second section, children are prompted to describe a recently experienced neutral event in detail. This “training” is designed to familiarize children with the open-ended investigative strategies and techniques used in the substantive section while demonstrating the specific level of detail expected of them (Lamb, et al., 2007) (See Figure 2).

### **Rapport building.**

In describing the skills necessary for interviewing an abused child, Wood and Garven (2000) suggest that these include; the ability to communicate with children; to work as part of a team; to listen to accounts of distressing events without letting the content of the disclosure impair listening and facilitating skills; knowledge of the rules of evidence and the ability to use them in interviews with children; and an understanding of children’s welfare needs. Moreover, based on an extensive review of literature related to

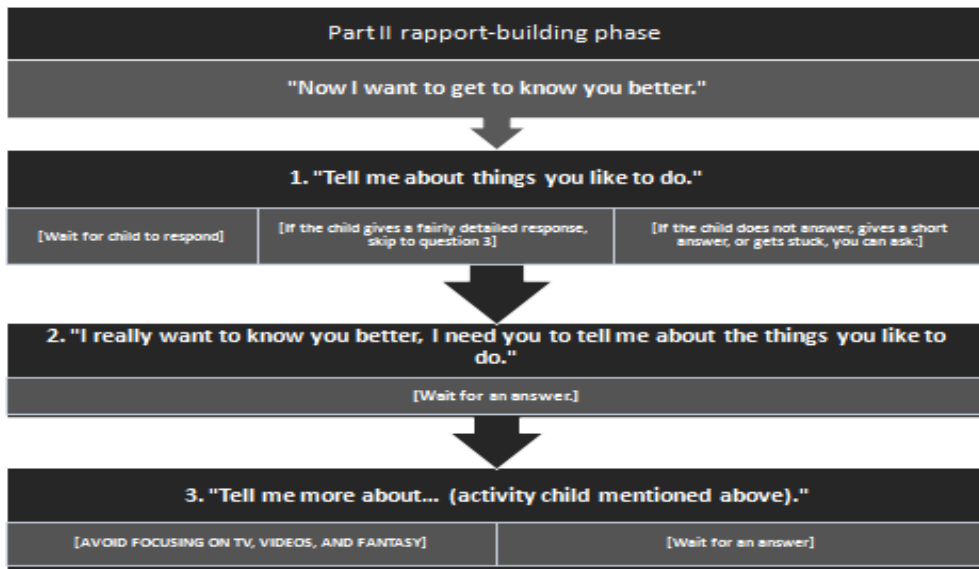


Figure 2: NICHD Investigative Interview Protocol (Lamb et al. 2007)

factors associated with children's disclosure of maltreatment, Cronch et al. (2006) made the following empirically derived recommendations for forensic interviewers:

*"forensic interviewers should possess experience working with children, previous training in interviewing or counseling, training in child sexual abuse and child development, a master's level education, an objective and nonjudgmental stance toward interviews, and the ability to take feedback constructively and change accordingly, and the ability to establish rapport through warmth and friendliness"* (p. 139, italics added).

Each of these guidelines suggests that rapport building should not be treated as a mechanical question-and-answer procedure; conversely, spontaneity should be encouraged.

Rapport describes a quality of relationship and implies a degree of regularity, predictability and coordination among interactants. Cappella (1990) pointed out that rapport may be the central construct necessary to understand successful helping or investigative relationships. A sizable number of terms have been used in the literature to operationalize the concept of rapport; terms such as "working alliance" and "therapeutic

alliance" (Horvath & Greenberg, 1994) have been used, as have more general descriptions such as "warmth" and "relationship quality." Conceptualized in this manner, rapport has been defined as "confidence and cooperation" (Kamphaus & Frick, 1996, p. 80), "acceptance, understanding, and respect" (Phares, 1984, p. 195), and "a comfortable and safe atmosphere" (Sattler, 1998, p. 60).

Clinical textbooks and assessment manuals that encourage clinicians to build rapport have generally referred to "rapport" as relationship quality at the earliest point in the relationship: upon first meeting (Gurland & Grolnick, 2003). During the assessment phase of treatment, the quality of the relationship has traditionally been referred to as "rapport" (Shirk & Saiz, 1992). In clinical settings first sessions are focused on obtaining information about the person's presenting problem and background and establishing rapport. In this vein it has long been noted that the development of rapport influences whether clients remain in treatment (Sharpley, Jeffery & McMaha, 2006), and is a fundamental determinant in treatment outcomes because a high degree of rapport creates interpersonal influence and responsiveness (Gurland & Grolnick, 2003).

From the clinical literature, verbal behaviors of particular format and type have been associated with instigation and strengthening of rapport. For example, Sharpley, Fairnie, Tabary-Collins, Bates and Lee (2000) conducted a study to investigate the effects of various counselor behaviors on client perceptions of rapport during initial interviews. From a total of 59 initial interviews with adults in a clinical setting, data suggested that minimal encouragers (utterances such as 'hum'), reflections of feelings and restatements were the most prominent of the traditional verbal response modes in rapport building. Of



particular importance was the finding that clinicians who opened interviews with reflections of feeling at a rate of once per minute were more likely to be immediately rated as rapport building than if they did this half as much.

These findings are important because additional research in terms of rapport building skills in a clinical setting have revealed that the clinician's nonverbal behavior is a powerful means of projecting a message of caring to the client, and may either strengthen or weaken rapport between clinician and client (Highlen & Hill, 1984). Furthermore, Mehrabian (1980) suggested that nonverbal clinician behavior could be responsible for over half of the affective content in clinicians' interactions with their clients.

Some of the more salient of these nonverbal behaviors that have been shown by previous research to influence the clinician-client relationship are eye contact (Sharpley & Sagris, 1995) and clinician posture and forward lean (Sharpley, Halat, Rabinowitz, Weiland, & Stafford, 2001). These findings are congruent with other research data. Tickle-Degnan and Rosenthal (1987) found that a global pattern of behaviors indicative of attentiveness, involvement, and a desire to get closer to one's interactional partner both physically and emotionally is related to rapport. Behaviors included in the global pattern are forward lean, direct body orientation, mutual gaze, smiling and gestures. By analysis of non-verbal behavior Tickle-Degnan reported that when these types of behaviors are viewed, individuals infer that the interaction under observation is characterized as having rapport.

Bernieri, Gillis, Davis, and Grahe (1996) demonstrated that independent observers can determine the level of rapport among interactants. Through the use of videotapes of mothers interacting with their own child, raters were asked to judge the interactions presented to them on the basis of simultaneous movement, tempo similarity and coordination and smoothness. Results indicated that raters were able to distinguish between true interactions between the mother and child and pseudo-interactions created by camera angles.

In a related and more recent study, Sharpley et al. (2001) examined two aspects of the counselor's nonverbal behavior—postural mirroring and standard posture (forward lean, direct body orientation, mutual gaze)—for their effects upon client-perceived rapport. Utilizing interviews performed by 59 post-graduate students in counseling psychology, videotaped recordings were used to code counselor posture across each minute of the interviews. These minutes were classified as ‘high’ in rapport or ‘low’ in rapport as measured by an individual trained to act as a client across several interviews (standardized client). Results indicated that there was significantly more postural mirroring of the torso during high versus low minutes, but that the counselor standard posture occurred significantly more frequently during low rapport minutes than in high rapport minutes.

Comparisons of the predictive quality of verbal and non-verbal behavior in terms of the development of rapport have suggested that postural and other nonverbal behaviors were the more accurate predictors of rapport. In a study of the behavioral correlates of liking among interactants meeting for the first time, Harrigan, Oxman, and Rosenthal

(1985) employed 50 high school students meeting students in dyads from different high schools and video recorded the interactions. After the students met and interacted with each other for 10 minutes, the students were then asked to rate the level of liking they experienced during the interaction. Independent judges then either viewed the (video-only) or heard (audio-only) tapes of the interactions and rated the subjects on a number of dimensions, including how much they liked each other.

The data revealed that the most powerful predictor of liking was non-verbal behavior. Specifically, interactants used verbal behaviors of an interaction partner of self disclosure, lively tone or pitch and emotion-laden content as indicative of rapport or of positive feelings. Observers judging the interaction used verbal cues of positivity and interestingness of content as indicators of rapport. Analysis of the data revealed that the raters who only heard the interactions were less accurate in their predictions of rapport than those who were exposed to video only.

The authors argue that this discrepancy renders verbal cues much less reliable than non-verbal cues when judgments are made by independent viewers. They suggest that those raters exposed to the audio portion only of interviews were more likely to focus on the content of the conversation. This over-reliance on content cues which do not correlate with rapport leads those presented with these cues only to make erroneous evaluations of rapport.

### **Rapport development in forensic contexts.**

There is agreement that even with the recent improvements in interviewing techniques investigative interviewers continue to experience problems of victim non-

disclosure, reluctance, and recantation (i.e. the child later denies that abuse occurred) (Pipe, Lamb, Orbach, & Cederborg, 2007). In an extensive review of the available research, Paine and Hanson (2002) grouped motivational factors related to self-disclosure into three categories of concerns, those pertaining to (a) self- feelings of shame and even guilt concerning what they experienced, (b) family and loved ones- fears of the consequences of disclosure and to protect familiar perpetrators, and (c) the perpetrator- response to threats, or inducements made by the perpetrator for secrecy. Paine and Hanson (2002) summarized their review by remarking that, taken as a whole, the research related to the motivational factors influencing children's self-disclosure reveal the magnitude of disclosure difficulties faced by maltreated children.

Cheung (2003) recognized that maltreated children often evince heightened vigilance and diminished trust in new interpersonal situations and are generally afraid to talk about their abuse experience with a "stranger". Although it is theorized that the development of rapport may help facilitate communication with children and encourage them to affirm and describe traumatic experiences in investigative interviews (Norfolk, Birdi, & Walsh, 2007; Yatchmenoff, 2005) only a few researchers have empirically assessed different styles of rapport building in investigative interviews with children or compared the results of interviews with and without attempts to build rapport (Lamb et al., 2007).

Notably, in the investigative context, research has been primarily aimed at interview processes (e.g. use of open ended prompts) that increase the level of information children will provide (Lamb et. al., 2007; Cheung, 2003), and have rarely

focused on observing how the child behaves during the rapport phase. According to Lyon and Saywitz (2006), efforts to develop rapport in child witness studies are cursory interchanges that are not designed to overcome high levels of fear or overwhelming concerns about safety, trust, embarrassment, or betrayal. Indeed, Cheung (1997) noted that many professionals "generally did not respond to or avoided personal questions that were related to the child's current feelings or emotions" (p. 277). Given that the experience of maltreatment may undermine children's ability to trust adults, the extent to which rapport can be developed through these brief interaction is of concern.

For example, in a qualitative study, Cheung (2003) analyzed a total of 4,373 videotapes of child sexual abuse investigations. The author reported that the rapport building questions used in more than 50% of the cases included: "What is your name?" (92%); "How old are you?" (90%); "When is your birthday?" (81%); "Who do you live with?" (74%); "Where do you live?" (65%); "Where do you go to school?" (61%). Cheung reported that in this sample over 30% of children did not report abuse or refused to talk to interviewers and argued that the types of questions interviewers used in this sample were insufficient to build rapport with children who may have been maltreated.

Several analogue studies shed light on the effects of rapport on children's willingness to disclose maltreatment. The effect of the length of rapport building in investigative interviews was the focus of a study by Davies, Westcott, and Horan (2000) comparing interviews including short (less than 8 minutes) and long (8 minutes or more) rapport building related to the amount of abuse-relevant information elicited from the children involved. They found that short rapport building was more likely to elicit longer

answers. They speculated that longer rapport building may have reduced the children's attention level and/or interviewers' efforts in the substantive questioning phase of the interview.

This finding is consistent with results reported by Hershkowitz, Orbach, Lamb, Sternberg, and Horowitz (2006) in a study that used the NICHD protocol to compare the dynamics of interviews of 50 children, 4- to 13-years-old, who disclosed maltreatment with 50 children did not disclose maltreatment. In all cases there was substantial reason to believe that abuse had taken place. The researchers reported that children who disclosed maltreatment were provided with fewer questions during rapport building than those children who did not disclose.

Findings also revealed that the questioning style used by the interviewer in the rapport-building sessions differed among the groups. In interviews of children who later did disclose abuse rapport building was characterized by higher proportions of free recall prompts than that used in interviews of children who failed to disclose maltreatment. Finally, children's disclosure was associated with a more supportive style of rapport: the amount of supportive comments made by interviewers during rapport building was higher for the disclosers than for the non-disclosers. Thus, children who did not disclose abuse during the later stage of the interview were somewhat uncooperative, offered fewer details, and gave more uninformative responses, even at the very beginning of the interview. Hershkowitz and his colleagues concluded that the rapport-building phase was less successful for non-disclosers than for children who made allegations of abuse and suggested that these children may require more extensive efforts to build rapport in order

to help them disclose their experiences. The authors did not, however, provide recommendations for practical efforts to establish rapport in the forensic context.

Furthermore, in an expanded design of the previous study Hershkowitz, Lanes and Lamb (2007) also analyzed interviewer behavior with children who did and did not disclose maltreatment during interviews. The authors reported that interviewer behavior was shaped by the children's reluctance to provide information even at the early phase of the interview. The authors observed that interviewers, although highly experienced, were clearly influenced by the children's reluctance to be informative and acted as though they were unaware of how important it was to maintain rapport. Herschkowitz and colleagues suggested that both interviewers and children may have communicated their incredulity and reluctance through non-verbal exchanges of body language and facial expressions earlier than the appraisals were communicated verbally, and this may have exacerbated the reluctance of the interviewers and children, respectively.

Finally, a recent field study reported by Ruddock (2006) generally supported the positive effects of rapport established between the child and interviewer in investigative interviews. Transcripts of child sexual abuse investigative interviews conducted by trained social workers in a child's hospital were examined. The researcher identified three components of rapport behavior: emotional rapport (emotion words and reflections), cognitive rapport (part nods and restatements), and visual rapport (eye contact). Greater rapport was in general associated with longer responses from the children, and specifically, emotional rapport positively predicted the number of details

children provided. On the other hand, cognitive rapport negatively predicted the number of details, whereas visual rapport had no effect.

Conversely, despite professional recommendations to develop rapport in investigative interviews with children and despite some empirical evidence supporting these recommendations, it seems that investigators often fail to establish rapport adequately with children. Field studies based on the analysis of investigative interviews with children who were allegedly abuse victims clearly indicated that investigators do not make the necessary efforts to develop rapport with their interviewees before shifting the focus to the abusive events and that the presence and quality of rapport building are often unsatisfactory (Hershkowitz et al. 2006).

### **Social support.**

Recently, researchers have emphasized the importance of studying the role of social support as primary and crucial to the investigative process (Hershkowitz et al. 2007; Jones et al. 2007; Mudaly & Goddard, 2006). Cobb (1976) defined social support as “information leading the subject to believe that he is cared for and loved, esteemed, and a member of a network of mutual obligation” (p. 300). More recently, Cohen (2004) conceptualized social support as the provision of both psychological and material resources with the intention of helping the recipient to cope with stress. Cohen proposed that social support functions as a stress buffer by reinforcing self-esteem, self-efficacy, and problem solving behaviors, whereas feeling socially excluded or disconnected from others has deleterious consequences.



Similarly, social support is described as a multi-dimensional construct and is explained through social cognitive theory which posits that psychosocial functioning occurs within a triadic reciprocal causation (Bandura, 1986). In this model of reciprocal determinism, (1) cognitive and other personal factors, (2) behavior, and (3) environmental events all operate as interacting determinants that influence each other bi-directionally. Each of the major interactants in the triadic causal structure—cognitive, behavioral, and environmental—functions as an important constituent in the dynamic environment. Thus, social support occurs within the context of relationships and ranges from the positive benefits of having a confidant, being part of a group, perceiving ones' neighbors to be friendly, or even receiving a telephone call from a helpful friend.

In practice, social support can be broken down into different components:

1. *Emotional support*: the sense of being able to turn to others for comfort in times of stress; the feeling of being cared for by others;
2. *Social integration*: the feeling of being an accepted part of an established group or social network;
3. *Esteem support*: the sense of receiving positive, self-affirming feedback from others regarding one's value, competence, abilities or worth;
4. *Practical, instrumental or informational support*: the knowledge that others will provide financial, practical or informational assistance when needed; and
5. *Opportunities for nurturance and protection*: the sense of being needed or depended upon by others (Collis & McNicholas, 1998, p. 115).

Over the last twenty years, the capacity of supportive social relationships to buffer or ameliorate the deleterious effects of prolonged or chronic life stress has been buttressed by a extensive body of evidence. For example, Thorsteinsson, James and Gregg (1999) performed a meta-analysis on experimental studies on the effect of social support on different indicators of psychological stress. All of these studies tested the effect of someone who provides support (friend, research confederate) in the form of

verbal comments or physical presence during a stressful task. Although the results have to be interpreted with caution, the meta-analysis showed that challenging social situations become increasingly stressful when there is no social support.

Perhaps the strongest research evidence for countering the adverse effects of involvement in the criminal justice system points to the role of non-offending mothers in supporting their children. Caretaker support and belief in the allegation have been shown to play a significant role in children's disclosure. Lawson and Chaffin (1992) found that children with sexually transmitted infections whose caregivers were supportive, disclosed at a rate 3.5 times greater (63%) than those whose caretakers were “non-supportive” (17%). In this study support was minimally defined as the caretakers' willingness to accept the possibility that their child may have been sexually victimized and the absence of evidence of punishing or pressuring the child to deny abuse. The authors noted that conditions in more functional homes, such as greater support and stability, may have favored disclosure.

Findings from a number of studies of children's response to anogenital examination have identified the preconceived expectations of the caregiver as a significant factor affecting variations in the emotional impact of the examination on the child (Dubowitz, 1998). Children whose caregivers expressed anxiety regarding a medical examination were less cooperative and more distressed by the examination than children whose caregivers were less distressed. These findings were supported by Lippert, Cross, Jones, and Walsh (2009) in a study of the relationship between caregiver support and child disclosure. Lippert and colleagues found a positive correlation between

maternal support and child disclosure (i.e., the likelihood of disclosure increased when a primary caregiver was supportive).

In contrast, Elliott and Briere (1994) examined the results of forensic evaluations of 399 children between the ages of 8 and 15 who were seen at an urban evaluation center regarding allegations of sexual abuse. When abused children who disclosed abuse were compared those who had not disclosed, yet had been abused, a higher percentage of supportive mothers were found with disclosing than with non-disclosing children (77.7% vs. 40.4%). Findings also revealed that children showed a higher rate of recanting disclosures of abuse when their caregivers were unsupportive.

Moreover, in an exploratory study of disclosure of extra-familial abuse in 30 Israeli children, ages 7 to 12, Hershkowitz et al. (2007) found that the children's willingness to disclose abuse to their parents promptly and spontaneously decreased when they expected negative reactions, especially when the abuse was more serious. The researchers also reported a strong correlation between predicted and actual parental reactions suggesting that the children anticipated their parents' likely reactions very well.

Second, in a few analogue studies, the effects of supportive interviewing on children's memory performance have been positive in general, although inconsistent across several analog studies, and only a small amount of direct evidence of the effects of support in child sexual abuse investigations has been reported (Davis & Bottoms, 2002). For example, findings from a qualitative study undertaken by Back, Gustafsson, Larsson, and Berterö, (2011) conducted with 10 children—9 girls and 1 boy between 9 and 15 years old—who had experienced the legal process in relation to maltreatment support

these findings. The authors found that reluctant children were likely to report that they did not believe that they could trust the interviewer to the extent that they wish they could, stating that the support they were given was not sufficient. However, it is unclear to what extent interviewers are being supportive of the children and whether or not support enhances children's testimony about abusive crimes in real-life investigations.

In a field study Hershkowitz et al. (2006) examined the pre-substantive phase of 100 forensic interviews with 4- to 13-year-old alleged maltreatment victims. The researchers compared the association between interviewers' support and children's willingness to disclose abuse, prior to any discussion of possible abuse. Supportive comments were characterized as comments anywhere in the interview intended to unconditionally encourage children to be informative, typically about neutral topics. Findings revealed that the level of interviewer's support was positively associated with the amount of forensic information obtained about the alleged crimes. The larger the amount of supportive comments interviewers addressed to the child in the interview, the more details were obtained. Findings also indicated that disclosers who received high levels of support denied less, whereas non-disclosers who received high support denied more. This finding was consistent with results from previous laboratory studies (Carter et al., 1996; Davis & Bottoms, 2002), which indicated improvement in the children's memory performance in supportive interviews.

More recently, Herschowitz et al. (2007) examined to what extent the length and questioning style of the rapport-building session and the support interviewers provided to a sample of 71 Israeli children of two age groups (4-6 and 7-9 years) were associated

with the amount of forensic details children provided in maltreatment investigations. Support in this study constituted either a request for information addressed personally to the child (with mention of her name) or an utterance including neutral reinforcement. Findings revealed that rapport-building sessions that were shorter and contained open invitations for personal narratives, as well as a supportive approach from the interviewer, resulted in the child's disclosure of an increased amount of forensic details. Findings revealed that although the association between rapport building or support and children's production of forensic details was statistically significant, its strength was moderate. Herschowitz and colleagues noted that though a short rapport-building session was positively correlated with the amount of details in both age groups, the positive association with interviewer's support was evident only in the older children.

Thus, because maltreated children may have special difficulty establishing rapport providing social support may be more critical than efforts to develop rapport. However, as the relationships between support or rapport-building variables and the amount of details children produced are correlational in nature, these findings should be interpreted with caution. Furthermore, Herschowitz suggested that more research is clearly needed to clarify the guidelines by which socio-emotional factors should be used in forensic interviews.

### **Prosecution of child maltreatment**

The decision to prosecute child maltreatment is extremely complicated and presents special challenges that can make prosecution difficult. The criminal justice system's mandate does not focus on the needs, wants, or interests of the child victim or

family. Being held to the standard of 'beyond a reasonable doubt', the prosecutor must handle the case in a manner that benefits his/her client—the state or other legal municipality. Despite its importance, however, basic data about prosecution of child maltreatment have not been systematically compiled. The federal Bureau of Justice Statistics reports data on prosecution of many different crimes (Reaves, 2001), including many that would include child maltreatment (e.g., rape, assault), but it does not generally present data separately for victims of different ages.

Cross, Walsh, Simone and Jones (2003) conducted a meta-analysis of rates of criminal justice decisions in 21 studies of prosecution of child maltreatment. Each study gathered samples of state court felony defendants for a 1-year time frame in 30 to 40 of the most populous U.S. counties. The small number of available studies (14) varied considerably in the proportion of cases that were sent to prosecutors and the proportion on which prosecutors filed charges, ranging from 28% to 94% (average rate 66%). This rate suggests that, compared to national charging rates, child maltreatment cases were less likely to have charges filed than most other violent crimes.

Similarly, in a comparison study of 1043 maltreatment cases reported to CPS in which children had completed an investigative interview, Stroud, Martens, and Barker (2000) found that a significant portion (44%) of the children in the sample had their criminal cases dropped. Analysis revealed that while 60% of the cases involving female children were recommended for criminal-action, only 46% of the cases involving male children were referred for prosecution. The authors noted that, across all ethnic groups, approximately 50% of investigated cases were referred to the prosecutor. However, just

over 25% of child maltreatment cases involving Native American children were referred for criminal action.

These studies support similar findings reported in the literature suggesting that differences between criminal-action and dropped cases are related to the children (age, sex and ethnicity), the alleged offenders (age, sex and relationship to child), and the case characteristics (eyewitness evidence, disclosure and injury to the child) and were all significantly related to acceptance for prosecution. In general, those cases more likely to be charged involved children over six years old; more severe maltreatment; abuse of longer duration; and extra-familial perpetrators (Sedlak, Doueck, Lyons, Wells, et al. 2005; Walsh, Jones, Cross & Lippert, 2010).

Taken together, these findings suggest that the evidence available to prosecutors, short of confession, is seldom so compelling that it impels prosecution independently of such factors as the child's ability to testify about the abuse. Thus, prosecution most often depends on the testimony of child victims, the child's credibility with juries, and capacity to withstand the stress of a criminal trial (Back et al., 2011).

### **Impact on the child.**

Contrary to the assertions by some professionals that children “deserve to have their day in court,” research to date demonstrates that testifying in criminal court can have a detrimental impact on child wellbeing, especially when repeated court appearances are required (Alexander, Quas, Goodman, & Ghetti, 2005) and there are long delays between discovery of maltreatment and court testimony (Everson, Hunter, Runyon, & Edelsohn, & Coulter, 1989). During the last decade a few studies have begun

to disentangle children's distress caused by maltreatment from the emotional consequences of participating in the legal system, by controlling for factors such as initial psychological well-being and severity of the abuse. Mental health clinicians and criminal justice professionals have expressed concern about the “revictimization” of child victims who are involved in the justice system, and particularly those who testify in criminal court. Although research is limited, evidence suggests that the psychological consequences of child maltreatment extend beyond the effects of the abuse itself to the direct or indirect effects of related legal processes (Ghetti, Alexander, & Goodman, 2002).

Testifying in court is, perhaps, the most well documented aspect of criminal court involvement that affects children's experiences of distress. Indeed, although there is limited data regarding such impacts, research findings have emphasized that testifying is particularly distressing for children (Quas, Redlich, Goodman, Ghetti, Alexander, & Jones, 2005). Distress has, typically, been defined as overt (i.e., crying) or self-reported indices of intense negative emotions. For example, in an evaluation study the Child Witness Project, a large-scale intervention program conducted at the London Family Court Clinic, Sas, Austin, Wolfe, and Hurley (1991) explored children’s stress about testifying. Researchers developed a self-report questionnaire to measure children’s fears of testifying. The leading fears expressed by children (n=144 children, 5–17 years old) included taking the stand, having the accused lie in court, the accused not being found guilty, seeing the accused inside the courtroom or around it, and having people scream at



the child in the courtroom. The results of this study demonstrate that several components of testifying in court are potentially stressful for children.

To further examine children's stress in the courtroom, Saywitz and Nathanson (1993) had children rate their own anxiety while being questioned about an event in which they had participated. Two weeks after participating in an event, 8–10-year-old children were questioned either in an empty classroom at their school or in a courtroom. Following memory questions for the experienced event, children were asked to rate their anxiety for potential court related experiences. It was found that, of those potential court-related experiences, crying and answering questions in front of a lot of strange adults made children who were questioned in the courtroom significantly more anxious than children questioned in the classroom.

In an longitudinal study, Whitcomb, Goodman, Runyan, and Hoak (1994) administered two standardized measures of trauma to 256 child sexual abuse victims soon after their cases were referred for prosecution and between 7 and 9 months later. Findings revealed that children who testified had poorer mental health (i.e. lower scores on measures of self-concept, self-control, and behavioral problems at home) 7 months later than their counterparts who did not testify.

Conversely, Goodman, Taub, Jones and England (1992) used a matched pair design in which 218 children who testified at any criminal proceeding were matched with children who had not testified. Psychological tests were administered to these children at the time of referral to the study, with follow up testing at 3 months, 7 months, and after case disposition. This study, at 7 months, found children who testified showed

significantly higher measures of stress and anxiety but found no differences in measures of stress and anxiety at 3 months, and after case disposition. Interestingly, in 12-year follow-up interviews (Quas et al., 2005) conducted with 85 of the children who participated in the Goodman et al. (1992) study, no significant long-term negative impact among participants who had been court-involved for sexual abuse was found, even among those who testified.

Moreover, children must testify in an austere, formal context with numerous unfamiliar adults observing (Hall & Sales, 2008). The legal system consists of a prescribed set of rules unfamiliar to most children and adults. Research shows that children have difficulty understanding the language used in the courtroom, feel uncomfortable in this environment, and have a faulty understanding of terms, concepts, attitudes, and people in the legal system, and that children feel fearful of not understanding the questions asked in court (Cross, 2012; Henry, 1997). For example, Saywitz and Campo (1989) compared children with prior legal involvement to those who had no contact with the legal system. The sample in this study consisted of children aged 4–14 years, half having been a witness in a legal case in the previous 3 months and the remaining half having had no formal experience with the legal system. Children were asked several probing questions about concepts relevant to the court process (e.g., jury, court). The results were counterintuitive in that children with first-hand experience with the legal system demonstrated lowered scores related to overall knowledge of legal concepts. Saywitz and Campo (1989) argue that the results may indicate that the legal

system appears far more chaotic and confusing to children who have been involved as witnesses than children who have not been involved with the legal system.

Despite lengthy lists of recommended interventions intended to ameliorate the negative impact of court involvement on child victims, little is known about the frequency with which such interventions are in fact used, for which children, in which courts, and under what circumstances. Only a few interventions have been tested or evaluated to determine their impact on the mental health of child victims (Ghetti, Alexander, & Goodman, 2002). An example of one such program is the Court Prep Group at the National Advocacy Center in Huntsville. Children acquire relevant information through artwork, puzzles, and mock court role playing, and a tour of the courthouse. While doing so, children are provided the opportunity to explore the courtroom to gain familiarity with it. According to a survey conducted by Goodman, Quas, Bulkley, and Shapiro (1999), prosecutors reported that children's preparation is helpful in decreasing children's distress while testifying. While the professionals who implemented the program felt that the Court Prep Group was helpful for children, a formal evaluation of the children's experiences has yet to be documented.

Another practice, proposed to reduce the negative consequences of a court appearance, makes external sources of support available for children during legal involvement. For instance, in many states laws allow the presence of a supportive adult with the child in the courtroom (i.e., Delaware Code, 1994; Idaho Code, 1995). In addition, Judge Holland commented, during a discussion of ethical issues in courtroom procedures, that children have been allowed to hold the hands of child advocates who are

not identified to the jury (American Bar Association, 2012). As with the Court Prep program, no evaluation of the influence of the practice on children's experiences has been conducted to date.

Because taking the stand is a particularly difficult step for children, the use of closed circuit television testimony (CCTV) has been implemented to address the needs of child victims. Although there is no empirical evidence to support the practice, CCTV has been ruled by the Court as the equivalent of in-court testimony when needed to maintain the truth-seeking purpose of a trial. Conversely, research indicates that jurors seem less likely to convict the defendant in cases in which children testify via CCTV compared to when jurors are presented with live testimony (Ghetti, Alexander, & Goodman, 2002). Whether and how the use of CCTV during the child's testimony affects jurors' perceptions of the child's credibility remains largely unknown.

#### **Impact on caregivers.**

Prosecution often depends on the families' commitment to prosecution (Paine & Hanson, 2002) thus, accounting for the emotional status of caregivers is critical as their reflection on the investigation process is likely one of the most influential factors in the child's subsequent well-being and emotional response to the investigation. While a number of researchers have suggested that children's needs for support and basic caretaking could be compromised if caregivers are upset by the investigation process or experience investigators as critical and unsupportive (Elliott & Carnes, 2001; Plummer & Eastin, 2007) there is a paucity of research examining the impact of prosecution on caregivers. For example, in a qualitative study of non-offending parents Davies and

Krane (2006) reported that many participants stated that they did not receive the type or level of support that they needed from traditional interventions such as police, caseworkers, or counselors. Participants asserted that child safety officials seemed preoccupied with “winning the case” and “building evidence” to justify their actions.

In a mixed methods study Jones and colleagues (2010) interviewed 203 caregivers (62 % White, 26% African American, 6% Latino ethnicity) in 10 communities about their satisfaction with child maltreatment investigations. Information on their experiences was also collected through quantitative satisfaction surveys created for the project. Despite caregivers’ high ratings of satisfaction with forensic interviews and the investigation process as a whole (3.2 out of 4 (SD = .74), it is of note that there were differences in the focus of caregiver responses to open-ended questions. Almost all could identify aspects of the investigation that were worse than expected and almost half of respondents answered the question with multiple concerns. The most common responses by caregivers about what was worse than expected about the investigation were in regard to were the investigators’ commitment to prosecuting the alleged offender and the absence of clear and regular communication about the status of the case. The researchers reported that a number of mothers expressed frustration in how they were treated by investigators, experiencing them as critical and unsupportive.

Although Jones et al. did not suggest factors that may have contributed to mothers' frustration Davies and Krane (2006) found that women are often anxious and fearful of engaging with child protection authorities as they fear that they will not receive support and that their children will be removed. Fears regarding CPS workers’ and the

criminal justice systems' treatment may be well-founded. For example, Li, Godinet, and Arnsberger (2011) reported that in surveys conducted with 100 mothers attending an urban gynecological clinic data revealed that mothers with a history of childhood maltreatment were more likely to have a child maltreatment report. In contrast, mothers who were married, mothers who attained 12 or more years of education, and families with high level of social support were less likely to have a child maltreatment report.

Similarly, Johnson and Sullivan (2008) interviewed twenty women who were victims of domestic violence about their experience with CPS workers after reporting abuse of their own children. The researchers found that most of the mothers felt misunderstood and unsupported by CPS workers. The mothers reported being quickly and unfairly blamed for their children's ordeals and treated as though they were grossly neglectful mothers. Johnson and Sullivan noted that although a number of training programs have been designed to increased caseworkers' understanding of and empathy toward mothers who are victims of domestic violence, they questioned whether this understanding has translated into more effective services.

The unsupportive criminal justice response for non-offending mothers has been further explored by Bolen and Lamb's (2004) study of 30 non-offending mothers whose partners sexually abused their children. The researcher found that in this study approximately a third of non-offending caregivers responded to their child's disclosure of abuse with ambivalence or partial support, and these non-offending caregivers are at greater risk for having their children removed. Bolen and Lamb noted that many non-offending mothers suffer from posttraumatic stress disorder and depression after

disclosure of their child's maltreatment and argued that the non-offending caregivers' ambivalence may be both a precursor to and an effect of the traumatic experience of the disclosure.

Bolen and Lamb noted that researchers frequently conceptualize ambivalent support as a pattern of caregiver support that falls between optimal and negative support (Lippert, et al. 2009; Douglas & Walsh, 2010). However, even though ambivalence/partial support is operationalized as a midpoint between support and nonsupport, it appears to be treated in the CPS and criminal justice system as an indicator of nonsupport and thus as a rationale for removal. This conceptualization is supported by empirical studies suggesting that non-offending caregivers of maltreated children experience symptoms of PTSD following the child's disclosure of maltreatment (Elliott & Carnes, 2001) as well as studies reporting that non-offending mothers are more likely to experience elevated levels of general distress if the mother feels alone in dealing with the allegations or if their children testifies in court (Ghetti et al., 2002).

This issue may be of even greater concern when mothers are themselves abused or suffering from depression, anxiety, or other debilitating condition. Although several studies have examined whether maternal responses to maltreatment of one's child are associated with a history of maternal childhood abuse, the relationship between mothers with histories of childhood maltreatment and their response to the maltreatment of their own children is equivocal. Some studies such as Leifer et al. (1993) found that mothers' history of maltreatment was not a significant predictor of maternal support. However, the results did suggest that maternal substance abuse and social isolation were important

mediating variables between maternal history of abuse and the mother's response to her daughter.

Conversely, Locke and Newcomb (2004) examined how adverse childhood experiences (child maltreatment) predicted poor parenting in a community sample (237 mothers). Results suggested that early maltreatment directly and indirectly influences later parenting practices. The authors suggest that childhood maltreatment may not only impair women's ability to develop necessary social support structures, but, in turn, could also make them ineffectual as supporter providers. Moreover, research examining non-offending mothers with a history of childhood maltreatment report that these mothers experience significantly more general psychological distress and PTSD symptoms than do mothers without such a history (Elliott & Briere, 1994).

In summary, whereas legal procedures have been at times modified to assist children, the effects of the introduction of new procedures on children's distress and jurors' perceptions of the child and likelihood to convict are just beginning to be studied. Ghetti et al. (2002) observed that studies have not examined whether it is possible to detect long-term benefits of innovative measures and suggested that although these measures may alleviate children's distress in the short term, it is unclear how they contribute to later feelings and perceptions about the legal experience. Additionally, studies thus far have mainly compared children's reactions to a single type of intervention versus traditional procedures instead of directly contrasting the beneficial effects of different innovative techniques. The researchers noted that producing changes in legal procedures is far from easy and recognized that professionals involved are at



times reluctant to make changes, in part because implementing any change has high costs. Ghetti et al. (2002) also acknowledged that this type of research could contribute to the resolution of controversies between accommodating children's needs and respecting defendant's rights.

Past investigation reform has appropriately focused mostly on children's needs, and we should continue to make sure that we are protecting children from undue additional distress and following up on children who may be at risk for adverse outcomes. However, it may be time for child abuse professionals to also focus some key next-step reforms on the concerns of non-offending caregivers. Even with the numerous investigation reforms that have been implemented over the past several decades, child maltreatment investigators and professionals may need to develop and target further reforms to address aspects of investigations that remain most frustrating and difficult for caregivers (although some court preparation programs have parallel educational components for parents). It may be useful to consider developing initiatives explicitly designed to help mothers more effectively support their children.

Modifications in the investigation and prosecution of child sexual abuse cases to address the needs of child maltreatment victims and their families have been made over the past decade (e.g., closed circuit testimony and crime victim advocacy). However, due to the adversarial nature of the US criminal justice system, problems still exist when criminally prosecuting child maltreatment charges. Taken together these studies suggest that although considerable progress has been made in the way in which criminal justice responds to child maltreatment; considerably more work is needed because such

information could improve our ability develop and target effective ways to address aspects of the process that remain most difficult for child victims and their families.

### **Pets and people**

At the heart of the question about the inclusion of dogs in criminal justice CPS is the nature of the human–animal bond and the impact of animals on humans. In America today, more people have pets than children and companion animals can be found in 62% of American households (HSUS, 2009). Seventy percent of households with children under six years of age have pets, while in households with children over six years of age 78% have pets (American Pet Products Manufacturers Association, 2011). Children growing up in the U. S. are now more likely to live in the same household with a pet than with biological father or a sibling (Melson, 2001). Significantly, findings from a number of studies have revealed that a majority of individuals with pets consider them to be members of their family and perceive pets as important, supportive participants in their lives (Reaser, Clark, & Meyers, 2008; Voith, 1985). These findings can be demonstrated across age, race, gender, sexual orientation, socio-economic status and life condition (Cain, 1985; Risley-Curtis, 2010; Risley-Curtiss, Holley, & Wolf, 2006). Nonetheless, the study of human-animal relationships, historically, has been ignored by social psychologists and human service providers and continues to resist attention.

In the 1980s, the role animals play in human health changed with the publication of a groundbreaking study by Friedmann, Katcher, Lynch, and Thomas (1980), which investigated survival rates among heart-attack survivors one-year after discharge from the hospital. The results revealed that those individuals who owned a pet had a significantly

greater survival rate than those who did not, even when controlling for variables such as age, gender, and severity of heart attack. The authors concluded that pet ownership was a significant variable related to one-year survival following heart attack.

The study received significant academic and public interest and stimulated research on the protective benefits of pet ownership for both physical and mental health. Later research (Friedmann & Thomas 1995) supported the original Friedmann et al. (1980) findings, resulting in the proliferation of research that focused on the influence of companion animals on physiological signs of health. Additional studies have supported the findings that pet ownership has benefits for human health, including lowering blood pressure and heart rates (Wilson, 1991). Other significant effects of pet ownership on a variety of physical indicators of health include “changes in systolic and diastolic blood pressure, plasma cholesterol, plasma triglyceride, and skin conductance responses” (Odendaal & Meintjes, 2003, p. 298).

Although the benefits of pet ownership have been well-documented, there is also research to suggest that people need not own an animal to receive benefits from human-animal interaction. For example, Odendaal and Meintjes (2003) found that subjects who spent time with either their own dog or an unknown dog demonstrated similar increases in neurochemicals associated with feelings of well-being and relaxation and decreases in cortisol, a hormone associated with stress. Compared to other calming activities such as quiet book reading, interaction with animals resulted in greater changes to relaxed feelings and lowered cortisol.

Moreover, a study conducted by Barker, Knisely, McCain, and Best (2005) found that lower salivary cortisol levels (stress hormones) could be detected in nurses after they experienced as few as five minutes with a petting a dog. The results of similar studies examining the effects of other types of relaxation techniques such as listening to music, resting quietly, guided imagery, or watching a humorous movie, on cortisol levels were not significant in this study. These results suggest that even very short interactions with a companion animal can have beneficial effects on health parameters related to stress.

### **Animals and stressful interactions.**

Beyond the physiological and behavioral benefits reported above, the presence of animals appears to increase rapport between people during stressful social contexts. Empirical studies of social influences on stress have revealed that individuals draw on members in the same environment to cope with distress. The distressed individual mirrors the relaxation of other members to calm the self. Referred to as social-buffering effects, studies have found that emotional expressivity acts as a marker for trustworthiness and promotes cooperative behavior among people. Individuals who are able to clearly display their emotions will be perceived by social partners as trustworthy. In turn, perceived trustworthiness fosters the formation of cooperative alliances (Boone & Buck, 2003).

A number of studies evaluating the benefits of the presence of a companion animal on stressful human interactions have reported mixed results, making it difficult to make comparisons and to generalize the results. Some studies of adults in stressful situations have evinced that the inclusion of companion animals during such interactions results in lower physiological arousal. In one of the earliest studies of this hypothesis

Katcher, Friedmann, Beck and Lynch (1983) reported that, under moderately stressful conditions (e.g. reading aloud), the presence of a friendly, unfamiliar dog moderates the expected increase in blood pressure. This study provided some of the first research-based evidence for the effect of interaction with animals on physical measures of stress.

More recently, Allen, Blascovich, Tomaka, and Kelsey (2001) measured autonomic responses to stress in women asked to perform mental arithmetic in the presence of an experimenter only, with the added presence of a friend, and in the presence of the experimenter and the women's own pet dog. Subjects were 45 self-selected, adult women ranging in age from 27 to 55 years. Autonomic reactivity was assessed through measures of pulse rate, skin conductance, and blood pressure. Results showed that autonomic reactivity was significantly reduced in the dog-present condition compared to being alone with the experimenter, and that the friend-present condition resulted in a significant increase in autonomic reactions. The authors suggested that the dog may serve as a non-evaluative presence, providing social support and acting as a buffer against the subjects' stress, while the friends were perceived as evaluative, resulting in an increase in stress. Since the subjects were self-selected for the study and served as their own control group, generalizability of the results is limited.

In contrast, the relaxing or anxiolytic effect of interaction with a friendly, but unknown, dog was examined by Wilson (1991). In this study, 92 self-selected college undergraduates were observed under each of three conditions: reading aloud, reading quietly, and petting a friendly dog. Anxiety was assessed through blood pressure monitoring and the use of a common self-report measure of anxiety. Reading aloud

differed from baseline measure under all treatment conditions. While interaction with the unknown dog produced a decrease in anxiety level, pet owners did not report the use of their own pet as a social support (i.e., as confidant) significantly more than did former pet owners who did not currently keep a pet. Results indicated that interacting with a pet for some individuals does affect both physiological and psychological responses by lowering response levels. However, in this study a parallel relaxation effect was also seen in those students who read quietly without a dog present.

While Allen and colleagues (2001) concluded that the presence of a dog during stressful activities was *more* relaxing than the presence of a friend, Wilson argued that petting an animal shows a relaxing or anxiolytic effect *similar* to other relaxation activities such as reading quietly; the effect did not vary based on race, sex, or pet ownership. This study supported the potential for interaction with animals to decrease symptoms of anxiety. However, the conditions under which the subjects were tested was not designed to elicit elevated levels of anxiety. Interaction with the dog took place separately from the other conditions. Consequently, it is not clear from this study if interaction with a dog would serve to lower levels of anxiety in the presence of an anxiety-inducing stimulus or if the effects of interacting with the dog would be similar to merely engaging in any restful activity. Additionally, the subjects were self-selected to participate in the study, resulting in a lack of randomization that may have affected the results.

### **Animals and children's physiological stress.**

The impetus to include animal in settings or procedures which may be stressful for children proceeds from the assumption that a friendly animal reduces stress and allows a child to respond with less anxiety and defensiveness in the therapeutic milieu (Parish-Plass, 2008). These processes, theorized to be an activation of the attachment system (Bowlby, 1969) are thought to occur even when the animal is not the child's pet and the child has limited interaction with the animal. This hypothesis is supported by interpretation of indirect evidence from two bodies of evidence. One body of evidence report findings in which the stress-reducing effects of a friendly dog are suggested by physiological responses as described above in adults.

Results of studies investigating the effects of the presence of companion animals on children's physiological response to stressful situations reveal similar, but less stable, stress-buffering responses as for adults. In a descriptive study, Gagnon, Bouchard, Landry, Belles-Isles, Fortier, and Fillion (2004) found that the presence of dogs in a pediatric inpatient setting helped alleviate distress among children. The presence of visiting dogs was associated with less fear and pain among pediatric patients with cancer undergoing venous port access procedures. Similarly, Baun, Oetting, & Bergstrom (1991) found that children undergoing orthopedic examinations demonstrated lower physiological arousal when a companion animal was in the examination room than children undergoing the same procedures without an animal in the room.

However, in a clinical study of children undergoing dental procedures, Havener, Gentes, Thaler, Megel, Baun, et al., (2001) found there was a positive effect on

physiological arousal only for those children in the experimental group (in which a dog was present) who initially verbalized distress. There was no positive physiological effect of having a dog present for children in the experimental group who did not verbally express distress.

Beyond physiological benefits, for children, the presence of animals has been shown to reduce *behavioral* distress (i.e., crying, scowling, anger, lack of interest, expressed helplessness or hopelessness, absence of vocal expressions or facial animation, vacant or unfocused gaze, and little or slow movement). For example, in a simulated laboratory investigation, Nagengast, Baun, Megel, and Leibowitz (1997) found statistically significant decreases both in physiological arousal and in behavioral distress when a physical examination was performed in the presence of a companion animal.

The finding of significantly less behavioral distress when a dog was present was replicated by Hansen, Messinger, Baun, and Megel (1999) in an experimental, repeated-measures study of children at a pediatric clinic. Physiological arousal and behavioral distress in children aged from two to six years undergoing a usual pediatric examination were measured with and without the presence of a companion dog. Thirty-four (14 males, 20 females) children were assigned randomly either to a treatment group (n=15) in which a therapy dog was present during their examinations or to a control group (n=19) which had the usual pediatric exam without a dog present.

Physiological variables (systolic, diastolic, and mean arterial pressures, heart rate, and fingertip temperatures) were measured at baseline and at two-minute intervals during each examination and children were videotaped during the examination for analysis of



behavioral distress. Physiological measurements did not vary statistically significantly between those children for whom a dog was present and those children without the presence of a dog. There was, however, statistically significantly less behavioral distress when the dog was present. The authors suggest that companion animals may be useful in a variety of health care settings to decrease procedure-induced distress in children. These findings replicate those of Nagengast et al. (1997) who reported that the presence of a companion dog could lower the behavioral distress of children during a laboratory simulated physical examination and suggest that companion animals may be useful in a variety of health care settings to decrease procedure-induced distress in children.

Conversely, Schwartz and Patronek (2002) conducted a similar study in an urban dental clinic in which the presence of a dog resulted in no significant distress levels of children undergoing dental procedures. The authors reported that in their urban setting fewer than 5% of children in the study had a dog at home, compared to over 50% of the subjects in similar studies (Hansen et al., 1999; Havener et al., 2001). The authors suggested that cultural differences in attitudes toward pets and the children's lack of familiarity with companion dogs led them to be uninterested or even fearful of the dog used in the study, which may have contributed to the lack of significant findings. The authors concluded that there may be differences in what types of distress are amenable to animal-assisted interactions.

### **Animals and human interactions**

As interest in the influence of companion animals has grown, a number of studies have demonstrated that the presence of animals also alters the dynamics of human to

human interactions. One mechanism by which pets may exert a positive impact upon human health is through the facilitation of social interactions between people, thereby leading to elevated psychological well-being (McNicholas, Gilbey, Rennie, Ahmedzai, Dono, & Ormerod, 2005). That is, companion animals facilitate social interaction among humans.

In one of the earliest studies to explore this so-called “social lubrication” effect, Mugford and M’Comisky (1975) reported that when provided with a caged parakeet, elderly individuals engaged in more social interactions than those given a houseplant or nothing at all. More recently, Bernstein, Friedmann and Malaspina (2000) discovered that residents of nursing homes engaged in more social interactions (particularly long conversations) with each other in the presence of dogs and cats as compared to no animal presence. A similar effect was found in studies of this interaction outside of institutional settings. In a field study in which dog owners walked their usual or novel route both with and without their dog, Messent (1983) found that passersby made significantly more responses to the walkers accompanied by a dog (eye contact with walker, spoke to walker) than when the walker was alone. Similarly, Hunt, Hart and Gomulkiewicz (1992) found that passersby made significantly more social approaches to a woman sitting in a park when she was accompanied by a rabbit or turtle than when she sat alone blowing bubbles or with an portable television set.

Moreover, in many of the interactions in which conversations took place the dogs were touched and talked to as well. McNicholas and Collis (2000) reported similar effects in their study of people walking dogs on a university campus. The authors found that

individuals experienced a significantly higher number of social interactions (chance conversations with complete strangers) whenever they were accompanied by a dog than whenever they were alone. In addition, studies have consistently found that disabled individuals accompanied by a service dog receive more social acknowledgement than when they are not accompanied by the dog (Mader, Hart & Bergin, 1989). One explanation for these results may be related to the finding that the mere presence of an animal in some way makes a person appear nicer, approachable, and more inviting (Hunt et al., 1992).

### **Animals and social influence**

Why animals seem to be able to elicit such manifestations of reduced stress where other approaches are less effective or fail completely is far from clear, although the stress-buffering function of social support may be relevant (Barker, Knisley, McCain, Schubert & Pandurangi, 2010). Companion animals, by their very nature, transmit cues (e.g. tactile, olfactory, vocal, and visual) identified as responsible for stimulating stress-buffering effects (Morris, Frith, Perett, Rowland, Young, et al. 1996). Perhaps the earliest examination of the influence of a dog's presence was conducted by Corson and Corson (1978). The team of researchers brought dogs into group therapy sessions with 50 hospitalized psychiatric patients. Although the researchers reported a positive outcome for 47 subjects, they did not describe the dynamics of the actual interaction between group members, the dog and the clinician.

Several dissertations have investigated the influence of a dog's presence on the development of rapport between adults and an interviewer. Dickstein (1998) examined

the effects of the presence of a friendly dog on anxiety and rapport development in initial social interactions using self-report measures, behavior ratings, behavior coding, and a physiological measure of anxiety. The study examined dog owners who were paired with non owners for a 30 minute unstructured social interactions that was videotaped. For half of the participants the dog was present for half there was no dog present. Interactants rated their level of anxiety and rapport that they believe characterized the interaction. Subsequently independent raters judged the level of rapport evident in the videotaped interactions.

Dickstein reported that the presence of the dog resulted in lower salivary cortisol levels among dog owners but not non-owners. Additionally, an interaction between dog status of the dyad and time indicated that rapport tended to increase over the course of the interaction when the dog was present but remained stable in those interactions without the dog. Also, more affective displays occurred during interactions in the dog present condition.

Blender (2009) used a full cross-over design to examine how the presence of a dog, in conjunction with numerous participant personality characteristics, impact physiological reactivity, participant ratings of anxiety, rapport with interviewer, and motivation. Participants were 42 ethnically mixed undergraduate students recruited from psychology courses and offered extra credit for participation. Participants also completed initial self report questionnaires about their experience of anxiety, intrinsic motivation, rapport, bonding with the dog and their own pet, and personality traits with follow-up measures repeated during the second session, one week later.

The interview consisted of two sessions of a semi-structured interview about the participant's relationships with family of origin, and non-family members with either a male or female clinical psychology graduate student.. Half of the participants had the dog present at the first meeting while the other half of the participants had the dog present at the second meeting. Half of the participants spoke to a male interviewer and half spoke with a female interviewer at the first meeting, and half of the participants talked about family relationships at the first meeting and half talked about non-family relationships at the first meeting.

Results revealed that subjects' systolic blood pressure measurement was lower during interviews in which a dog was present. In addition, participants who had average levels of attachment anxiety were more motivated to participate in the sessions (revealing more information) when the dog was present. This finding was reduced, however, for participants who had high levels of attachment anxiety. For these participants, the dog's presence did not significantly increase motivation to participate in sessions. Blender found that only those participants who reported average or high levels of bonding with their own pet had higher ratings of rapport when the dog was present in the interview. Results revealed that rapport tended to increase over the course of the interaction when the dog was present but remained stable in those interactions without the dog. The dog's presence did, however, appear to influence rapport ratings depending on the gender of the interviewer. Participants rated rapport with the female interviewer as higher when the dog was present but no difference was found in rapport ratings of the male interviewer with or without the dog present.

An interesting finding in this study was the author's report of what appeared to be a disconnect between participants' objective physiological measurements and their subjective expression of anxiety. The author noted that it was expected that reductions in physiological measures of anxiety (i.e. blood pressure) would be accompanied by corresponding reductions in psychological measures of anxiety (i.e. verbal accounts of anxious feelings). However, while measures of physiological anxiety showed reductions in the presence of the dog, there were no corresponding reductions in measures of psychological anxiety. The flexibility of these measures in terms of assessing the effects of animals upon people may indicate that blood pressure is an unstable measure of anxiety.

Blender noted that many participants, following the interview, stated that they thought they were supposed to ignore the dog as they were instructed that the dog was in the setting as a convenience to the therapist. Blender observed that, as a result, most participants ignored the dog until the completion of the interview. This fact could account for the differences between physiological and psychological anxiety measures as the dog may have been a distraction to the participants who wanted to interact with the dog.

In a similar study Ceislak (2001) used a randomized posttest-only control group design to investigate the effects of the presence of a dog on measures of working alliance and perceived counselor credibility among students requesting university counseling services. Participants were 30 undergraduate students—between 17 and 23 years old, 97% Caucasian—who requested a counseling appointment at the university's student counseling center. The study used the author, a doctoral candidate, as the principal and

only interviewer. Data revealed that the dog's presence had a positive but non-significant impact on students' ratings of rapport. Furthermore, data suggested that the presence of the dog in the intake interview did not have a significant impact on the student ratings of perceived counselor credibility.

The author also reported several anecdotal observations that occurred during the data collection period that warrant inclusion. Ceislak observed that several participants displayed intense levels of emotion, mostly crying, during approximately 6 out of the 13 dog present intake sessions. In each of these instances the dog moved into the reach of the student, often lying his head on the student's lap. At each of these times, Ceislak noted that the student began to stroke and pet the dog while continuing to speak. She comments that two of the participants did not seem to be aware that they had begun to interact with the dog and others commented about the dog's response to their crying. Ceislak noted that students made specific comments about their feelings associated to the dog's response to them.

In one of the few published, experimental studies on the influence of dogs on rapport development, Schneider and Pilchak-Harley (2006) examined the effects of a dog's presence on 85 (60% female) college students' ratings of a therapist. Students viewed videotaped presentations of a male and female therapist introducing themselves and describing their qualifications and approach to therapy. Each therapist was videotaped giving the same presentation with a dog by their side and without a dog. Students were asked to rate the therapist on three sub- scales (expertness, attractiveness and trustworthiness) and overall.

Data revealed that therapists viewed with a dog in the video frame were rated higher than those in which no dog was viewed, and were perceived to be significantly more trustworthy. Therapists with a dog were also perceived to be more attractive than those without a dog. Even for those rating the therapists low overall, the therapists were rated significantly higher when in the presence of dog. The authors noted that results indicated that subjects viewing a dog-present interview perceived therapists to be significantly more trustworthy than subjects viewing a non-dog present interview. Interestingly, the authors reported that the positive effect of the dog on perceptions of the therapist affected personality characteristics (i.e., attractiveness and trustworthiness) but not perceptions of competence.

While using video to simulate interaction allowed Schneider and Pilchak-Harley (2006) to isolate aspects of interest in relationship building, the authors suggest that further effects may have been revealed by live clinical interaction characterized by bidirectional interactions. Numerous studies have reported that perceptions are based on multiple sensory cues and live interactions afford many more cues than does video (Rossback & Wilson 1991). Currently, no studies have investigated whether there are differences between people's perception of others from video or from live interactions. However, Lockwood (1983) notes that people associated with animals in pictorial scenes were often judged to be friendlier, happier, bolder and less tense, and as less dangerous both in the sense of being in less danger from others and being less of a threat to others.

It is also important to note in interpreting the results that each participant viewed only one video (either a dog in the video or no dog in the video). As the therapists were



not matched for gender it may be difficult to disentangle the effects of the dog from differences between a male and female therapist. Although the authors report no statistical differences between the observer groups it is possible that the subjects themselves may have revealed greater or lesser difference in their own perceptions had data for within subjects comparisons been available.

### **Animals as social influence with children.**

Melson (2001) wrote, "the study of children has been largely 'human-centric,' assuming that only human relationships... are consequential for development" (p. 5), yet "the ties that children forge with their pets are often among the most significant bonds of childhood, as deeply affecting as those with parents, sibling, and friends" (p. 16).

Looking at dogs as members of the family environment, Tannen (2004) documented the role that they play in interpersonal interactions within families. In speaking to and about their dogs, parents and children used the dogs to effect a 'frame shift' in conversation, introducing humor, buffering criticism, delivering praise, teaching values, resolving conflict and creating a family identity that included the dog. The specific relationship between children and pets has been explored by a number of studies providing a second body of converging evidence suggesting that some children find comfort and reassurance in their pets particularly when feeling stressed.

One of the earliest descriptions of the influence of pets on children's emotions was provided by Bryant (1985), who found that 13% of ten year old children she interviewed in a school setting spontaneously volunteered their pets in response to the question, "To whom do you turn when you are feeling sad?" Similarly, McNicolas and Collis (2001)

reported that 7-8 year old children (n=22) in the UK identified pets more frequently than humans in providing comfort. The results are particularly informative due as findings revealed that although pets were often ranked higher as providers of comfort, esteem support and confidantes for a secret, children did not nominate pets for functions they could not realistically perform.

Studies are now beginning to emerge which suggest that companion animals, which are not the child's own pet, can also act as sources of comfort and security thereby reducing anxiety (Bardill & Hutchinson, 1997). Although not technically therapeutic, a range of benefits including anxiety reduction, improved facilitation, engagement, retention and compliance with interventions have demonstrated that animals may serve as interaction catalysts between children and unfamiliar adults (Levinson, 1972). An early example is provided by anecdotal reports provided by Nebbe (1995), a school counselor, who noted that the animals in her office (most notably the fish) helped her establish rapport with the children whom she encountered. She wrote that the relationship with the animals seemed to create a bond between her and the children.

In the 1960s, psychiatrist Boris Levinson became aware of the benefits of including an animal in psychotherapy when he left his dog, Jingles, with a child who was extremely withdrawn and refusing to speak. Levinson (1969) reported returning to the room after several minutes absence to find the previously mute child talking earnestly to the dog. Intrigued by this discovery, Levinson began to employ Jingle's presence deliberately in therapy sessions with a number of children he saw over the next several years. Levinson kept careful records of the interventions used and the effects they had on

his patients, publishing his work in 1969 in a book titled *Pet Oriented Child Psychotherapy*.

Studies have found that emotional expressivity acts as a marker for trustworthiness and promotes cooperative behavior among people. Individuals who are able to clearly display their emotions will be perceived by social partners as trustworthy. In turn, perceived trustworthiness fosters the formation of cooperative alliances (Boone & Buck, 2003). Though trustworthiness is usually attributed to people, Myers (1998), in a year-long ethnographic study of preschoolers interactions with animals, reported that children responded to variations in animal's agency (i.e. independent behaviors), coherence, and affectivity. Furthermore, Myers (1998) found that children flexibly accommodated their interactive capacities to the differences in these features which the animals presented. The author posits that animals are conceptualized by children as "optimally discrepant social others". Myers suggests that by being sufficiently similar to humans to elicit pro-social behavior and positive affect, and sufficiently dissimilar to avoid posing a threat, animals may possess a unique capacity to mediate interactions in otherwise awkward or uncomfortable social contexts.

Although never published, Peacock's (1984) exploratory study is notable in its exploration of the influence of a dog on interactions between an adult and reluctant children. Peacock examined the role of a dog introduced in initial psychotherapy sessions with twenty-four (24) adolescent boys, diagnosed with conduct disorder, aged 12 through 17. The boys were housed in a detention center and were awaiting court trial. The boys were randomly assigned to either the experimental group in which the interviewer

brought her own dog in or a control group in which no dog was present. Groups were matched for age, race, educational level, and socioeconomic status.

Analysis of the data revealed that the presence of the dog enhanced subjects' feelings of relaxation during the hour. Boys in sessions with the dog demonstrated a significantly higher level of comfort in self disclosure and the presence of the dog seemed to reduce resistance as boys in interviews with the dog made significantly lower number of resistant, when compared with boys who saw the interviewer alone. Peacock noted that the boys in sessions with a dog also made statistically significant greater numbers of affective statements expressing love and also made a statistically significant higher number of references to loss and to loss experiences, when compared with boys in sessions without a dog present.

Even though the results of the study must be viewed with caution due to the small sample size (24) Peacock reports a series of interesting qualitative findings. First, the author was careful to point out that the results did not support Levinson's (1972) proposed 'halo' effect. Analysis of data regarding whether the presence of the dog influenced the subject's assessment of the subject-interviewer rapport, the subject's liking of the interviewer, the subject's perception of the interviewer's liking of him, or the subject's belief that the interviewer understood him, revealed no significant effect. Conversely, Peacock posits, the dog mediates not in the perception of the interviewer's personality but in the process of the interview itself. The inclusion of the dog did not to enhance the image of interviewer (Peacock), instead, the dog's presence engaged and relaxed the subject.

Second, Peacock further suggested that the interviewer became less frightening and more concrete and "real" for the subjects as the owner of the dog. The dog's presence may have afforded a buffer to dilute the subject's initial fears and also help the subject relax by providing tactile comfort, and transitional self-soothing. In this capacity the dog's presence may serve to moderate heightened arousal.

Third, it is proposed that this population of incarcerated adolescents may have encountered similar experiences to children (particularly adolescents) involved in the child welfare arena. It is well known that a significant percentage of youth in the juvenile justice system have maltreatment histories and their delinquent behaviors are often associated with non-disclosed abuse (Werner, & Crick, 2004). Peacock notes that, although reluctant to build rapport or to offer personal information, the adolescent is not the only person experiencing stress in the interview room. Similar to the investigative interviewer faced with a non-disclosing child, Peacock recognizes that therapists, for their part, often find the opening sessions of therapy with adolescents particularly trying.

In such a stalemate, the presence of the dog may prove to be a safe, and conflict-free topic for interactants. Tannen's (2004) findings that family members use dogs to create a 'frame shift' to buffer criticism, or resolve conflict are supported and expanded by this study as Peacock (1984) reported that when the interviewer seemed to be inquisitive about their pets, rather than probing about their personal feelings and experiences, the subjects relaxed and began to participate cooperatively. She noted that the boys did not find these questions threatening; rather, through the topic of the dog, they were able to often times spontaneously relate historical material about themselves and significant

family members early in the interview. Moreover, the topic of their dogs enabled boys when the dog was present, to reveal even painful material around their families. Boys in the no dog condition for the most part remained resistant to communication.

Fourth, Peacock found that the presence of the dog enabled the interviewer to demonstrate support through non-verbal interactions. Specifically, Peacock wrote,

*"The interviewer "held" the dog while the boy brushed him. Often, the subject periodically averted his eyes from the interviewer, ostensibly to groom the dog more effectively. Taking the cue, the interviewer lowered her eyes too, as if to watch the brushing more closely. Many subjects seemed to find the permission to avoid eye contact relieving." (pg. 93).*

Although Sharpley, et al., (2001) reported that two aspects of the nonverbal behavior—postural mirroring and standard posture (forward lean, direct body orientation, mutual gaze)—resulted in increased client-perceived rapport among adults, Peacock's quantitative data did not reveal this association but was instead revealed through qualitative findings that the adolescent boys in her study were relieved by an averted gaze.

### **Animals and the criminal justice response to child maltreatment**

The broad observation that animals hold a special appeal for children and youth (Serpell, 2006), and specific findings indicating their potential role as sources of comfort and security, and as catalysts for interpersonal interaction and communication (Levinson, 1969), suggest that the presence of dogs could have a considerable impact on criminal justice procedures in child maltreatment cases. However, the utility of generalizing the results from studies related to pet ownership and animal-assisted interactions is questionable given the significant variation between study constructs, measurement tools, and length and type of interaction between subjects and dogs.

In spite of this concern, advocates have suggested that dogs should be included across a number of settings such as children's advocacy centers, prosecutor's office, or other agency locations and throughout the criminal justice pathway including during the investigative interview, during the medical examination, or later for court preparation and courtroom testimony (Justice, 2007; Phillips 2010). However, given the meager results, to date, of the efforts reviewed above to improve children's services through inter-organizational services coordination and other innovative service configurations, it is significant that arguments for including dogs as judicial aids have failed to address those factors that have influenced the successful implementation of other innovative technologies. Evidence from implementation studies suggest that an organization's social context affects whether new core technologies (of which dogs as judiciary aids are an example) are adopted, how they are implemented, and whether they are sustained and effective (Hemmelgarn, Glisson, & James, 2006).

Foremost, although the studies of animal-assisted interventions contained in this review would seem to support the inclusion of dogs as judiciary aids in criminal justice, none of the studies were conducted in criminal justice settings. Results from the aforementioned studies suggest that animals produce a halo effect, imparting positive attributes onto the people they accompany are often cited to support the use of dogs in child maltreatment cases. However, the degree to which these effects are transferred across multiple agencies with differing organizational contexts and climates has not been explored empirically.

The findings from literature concerned with program implementation suggest that new technologies introduced into organizations can elicit resistance via organizational norms. Jaskyte and Dressler (2005), for example, found that across a sample of human service organizations, fewer innovations were related to aggressive organizational cultures. Implementation variability has led some scholars to argue in favor of a “sociotechnical” model, in which “organizational effectiveness depends as much on social processes as on technical processes” such that “effective implementation strategies must address the social contexts in which the core technologies are implemented” (Glisson, 2007, p. 738). It has been noted, above, that the mandates for each system are different, such that a focus on the needs of the child are often secondary to maintaining agency mandates and boundaries. In looking at the tensions between the different professional disciplines involved in child maltreatment it is, perhaps, not unfair to suggest that attempts at implementation across professional boundaries of an largely unsupported technology, such as dogs as judiciary aids, may run into difficulties.

Furthermore, current attempts to include dogs as judiciary aids has already run into challenges within the courts (Hart-Cohen, 2009; National Center for Prosecution of Child Abuse, 2007). Indeed, society’s view of dogs often differs from how the legal system sees them. While it is not within the scope of this review to analyze case law, it should be noted that the verdicts in a number of child maltreatment cases in which a dog was used as a judiciary aid are currently under appeal (Courthouse Dogs, 2011). At this writing, the website for one program providing training in the use of dogs as judiciary aids ([www.courhousedogs.org](http://www.courhousedogs.org)), has listed eight cases that are under appeal. In all cases,



the appeals are based, in part, on the presence of a dog on the witness stand with the child. The most common arguments that a dog's presence in the courtroom has been prejudicial to the defendant included the following:

- the presence of dogs violates the defendant's right to confront the witness
- there is no case law directly on point in regarding a dog's presence in the courtroom as a 'comfort item'
- the presence of a dog eliminated the courtroom pressure and trauma which ensures the fairness and reliability of the trial because it urges witnesses to tell the truth and "advances the trial's goal of truth"
- the dog's presence led the jury to the inexorable conclusion that the victim was a person in need of protection
- the jury would be led to believe that the victim is under stress as a result of her truthful testimony
- the presence of the dog would lend credence to the victim's testimony and lead the jury to believe her testimony
- the presence of a dog would overwhelm the jury's ability to discern truth from lies, causing it to be more sympathetic toward the victim.

At this writing, the appeals have been denied on the basis of Executive Law (Executive Law §642) which stipulates that Judges "should be sensitive to the psychological and emotional stress a child witness may undergo when testifying." The Courts have responded that with an "appropriately fashioned instruction to the jury, any possible prejudice will be minimized, if not eliminated."

Another concern regarding the successful implementation of dogs as judiciary aids is the lack of a consistent model of implementation. Indeed, advocates have used a number of different titles for dogs as judiciary aids including 'courthouse dogs', 'comfort dogs', 'facility dogs' and 'therapy dogs' (Phillips, 2010, Walsen, 2009). The variance in titles given the dogs is of concern as defense counsels have argued that the term 'therapy dog' implies that the child is in fact a victim in need of therapy and it is for the jury to decide if in fact the child was victimized. In addition, using the term "advocate dog" implies that the dog is the child's champion. Courts have found that the use of victim advocates for women can be prejudicial because of the appearance of vouching for credibility (See State V. Suka, 777 P2nd 240) (Dellinger, 2007). Some proponents have noted that as the use of dogs in the criminal justice system becomes more common with case law and statutes regarding their use are being published, the need for a clear understanding of the correct use of terms in this field becomes critical to ensure that the precedents being established are meaningful throughout the United States (Walsen, 2009).

Moreover, the current programs that include animals in criminal justice lack a conceptual framework and practice guidelines (i.e. specific goals for the interaction, duration of activities, behavior and training requirements of the dogs and handler skill requirements (MacNamara & Butler, 2010). In addition, while a number of programs employed volunteers to handle the dogs, other programs require that dogs be handled by criminal justice staff (Phillips, 2010; O'Neil-Stephens, 2009). However, recent research by Risley-Curtis (2010) reveals that the vast majority of social workers have had no

professional training regarding how to intentionally incorporate human-animal relationships in their work with clients, therefore there may be great variability in how the dogs are actually interacting with children and caregivers.

An additional controversy between programs is related to the requirements for the dogs' training and behavior. While some programs include pet dogs that have passed 'therapy dog' screening procedures (Phillips & McQuarrie, 2007) others require the use of dogs that have been trained through assistance dog organizations that traditionally train dogs to assist people with disabilities (Courthouse Dogs, 2010). However, there is no evidence that the differences in training and behavioral requirements do in fact exist or that the training for dogs to work with people with disabilities can be generalized to criminal justice.

These findings suggest that the dogs as judiciary aid 'technology' is soft, malleable, and more often than not adapted to "fit" organizations' existing social contexts (i.e., agency norms, expectations, perceptions, and attitudes). That is, the fit between criminal justice organizations' social context and this new technology is being implemented by adapting or reinventing the technology rather than by changing the social context to support the technology (Courtney, 2000; Glisson & Hemmelgarn, 1998). However, researchers in the child welfare field have suggested that the disappointing results found in the evaluation of child welfare programs are due precisely to the "lack of fit" between the model of causation that is the basis for most outcome-oriented evaluative research and the reality of how most large, complex public social welfare programs are developed and implemented" (Solomon, 2002, p. 385). Because implementing new

measures is costly and, at times, controversial, extended knowledge about such differential effects is of importance.

Finally, the most compelling argument for the use of dogs as judiciary aids is that the presence of a companion animal encourages the development of rapport between individuals. The degree to which a companion animal will influence interactions between children and an investigative interviewer may be quite different. Advocates for the use of dogs as judiciary aids often cite the findings of Bernstein, Friedmann, Thomas, and Eddy (2000) suggesting that companion animals positively influence human health and stress responses. However, these studies were conducted with adults living in the community where the stress and social discomfort may be radically different than that experienced by children or caregivers involved in criminal justice proceedings.

Melson (2007) noted that little is known about the human behaviors that facilitate the 'bridge' effect spoken of by many advocates of animal interactions,( i.e. what do therapists do that helps a child who establishes positive responsiveness to an animal transfer that to another human). Given that both the child and the interviewer contribute to the interaction, more information is needed regarding any changes that might occur in the child's behavior after exposure to a friendly dog. Overall, the nonverbal cues elicited by the dog when the child is introduced to the interviewer may reduce the child's feelings of arousal and perceptions of trustworthiness. One could speculate as to whether then this could alter the course of children's response during the investigative interview.

The research literature is of limited value in helping interviewers to maintain rapport and be supportive, especially when children may have emotional and

motivational reasons to avoid disclosing their experiences. When traditional rapport-building is unsuccessful, however, alternative means need to be explored. Lyon and Saywitz (2006) write that psychologists (and social workers) can work to shape the processes by which abuse allegations can be investigated and adjudicated fairly and fully.

At this time, current recommendations for working with reluctant victims who do not disclose abuse is to interview these children on another occasion (Hershkowitz et al., 2006). However, the biggest objection to redundant interviewing is that it could make children re-live the trauma of the abuse in the retelling. In limited research, findings have shown that repeated interviewing can lead to distortions in reporting, higher rates of self contradictions, and increases in children's levels of distress (Memon, & Vartoukian, 1996) and may reinforce their belief that they have done something wrong (Simone, Cross, Jones, & Walsh, 2005).

An alternative to repeated interviews may be the incorporation of a companion animal into investigative interviews. For example, Herschkowitz et al. (2007) noted that in addition to being uninformative, non-disclosers provided less information about themselves, their families, schools, and things they liked to do—personal topics that children were invited to talk about in the rapport-building phase. Saywitz and Campo (1998) identified experimentally supported rapport-building methods made use of in clinical contexts such as discussion of innocuous topics (i.e. favorite foods, television shows). However, the presence of a companion animal could provide a potential topic for conversation that draws children out and helps them provide information about themselves and the family through which interviewers may build rapport.

This review has noted that studies of social support have revealed that supporters model coping attitudes and skills (Bandura, 1977). Furthermore, the effect is enhanced when the observers believe that the individual demonstrating the behavior is similar to themselves; a "similar other". It is possible that animals, especially dogs, may serve as the 'similar other' for maltreated children who, due to the experience of abuse are likely to avoid cooperation with adults. In addition, the dog may serve as perceived support for maltreated children in that the dog may be viewed as a possible protector. For example, abused children may be more likely than non-abused children to talk to companion animals regarding their troubles and to see them as a means for overcoming loneliness (Robin, ten Bensele, Quigley, & Anderson, 1984).

As Platt (2008) noted, provision of a good working relationship between parent and the investigative team can do much to assist the child with the process. Although Horowitz, (2003) has suggested that the interviewer can ask caretakers in advance to encourage the child to go alone, the caretaker may also be experiencing increased anxiety or may experience investigators as critical and unsupportive (Hershkowitz, Horowitz, & Lamb, 2007). From the studies in this review of the need to assist parents to support their children during the investigative interview process, it is important to consider whether the presence of the dog may also serve to influence caregiver anxiety and satisfaction in this setting. To date, there are no studies investigating the influence of a dog on caregivers (or others).

Finally, some researchers have suggested the use of stress reduction techniques to decrease anxiety such as that reported by Alink and colleagues (2010). However, the use

of specific interventions to reduce stress such as preparatory videotapes or relaxation techniques have not been well studied. It should be noted that some relaxation videotapes depicted nonthreatening animals. Thus, the presence of a companion animal may serve to relax these children.

### **Present study**

The ability to understand the implementation process (how something happens) is critical to determining the likelihood that such practices will be tenable in complex real world settings as research suggests that poor implementation can lead to negative appraisals of program effectiveness when it is failure of the implementation process rather than the program that is responsible for poor outcomes (Aarons, Fettes, Sommerfeld, & Palinkas, 2012). Furthermore, legal system researchers such as Ghetti et al. (2002) have observed that producing changes in legal procedures is far from easy and recognized that professionals involved are at times reluctant to make changes, in part because implementing any change has high costs. The authors suggest that before investing a lot of energy and money in the implementation of innovative measures, it would, therefore, be useful to gain a better understanding of service provider's perspectives regarding factors that influence innovation implementation in criminal justice systems.

Taken together, the findings from the studies described above suggest that research is needed to increase our understanding of the way in which dogs may influence the criminal justice process, particularly because such information could improve our ability develop and target effective ways to address aspects of the process that remain

most difficult. This study provides an opportunity to add to the innovation implementation literature as there is much anecdotal information about potential benefits and practices for including dogs in forensic settings, but to date, we know of no systematic observation, interview, or other data collection research that has examined this new intervention. Ghetti et al. (2002) have acknowledged that this type of research can contribute to the resolution of controversies between accommodating children's needs and respecting defendant's rights. It is important to note that although the National District Attorney Association at first endorsed the use of dogs as judiciary aids (National District Attorneys Association, 2011) this endorsement has been rescinded due to some of the controversies discussed above (Phillips, personal communication, 2012).

Because the criminal justice response to child maltreatment represents a context where innovation implementation spans system, management, and organizational concerns, the purpose of this study is to explore the critical features or core elements that bear on professionals considering or have begun to include dogs as judiciary aides in investigation and prosecution processes. Findings from implementation research are being developed for understanding and improving implementation processes such as; understanding facilitators and barriers to implementation; understanding the process and outcomes of implementation; and testing novel implementation strategies (Aarons, et al., 2012; Palinkas, Horwitz, Chamberlain, Hurlburt, & Landsverk, 2011; Waitzkin, Schillaci, & Willging, 2008). In keeping with these findings the objectives of the current needs assessment are examined through the following research questions.



From the perspective of professionals involved in the investigation and prosecution of child maltreatment:

1. What are the *perceived* benefits of implementing programs with dogs as judiciary aids throughout criminal justice?
2. What specific roles do professionals identify for dogs within criminal justice?
3. What are potential barriers to the implementation of dogs as judiciary aids programs?
4. How are the needs and expectations of agencies considering incorporating dogs similar to or different from those agencies that are currently incorporating dogs?

## Chapter Three: Methods

### Design

Mendel, Meredith, Schoenbaum, Sherbourne, and Wells (2008) differentiate three types of evaluation applicable to innovation dissemination and implementation, and the research questions these processes pose: (1) capacity and needs assessment of contextual factors, (2) implementation and process evaluation of stages of diffusion, and (3) outcome and impact evaluation of patient and system outcomes. Each mode of evaluation provides important data for building an evidence base on successful dissemination and implementation strategies, as well as for guiding interventions as they are disseminated and implemented.

Needs assessments focus on what issues are most pressing and what gaps exist in various contextual factors (e.g., interest, resources, information, linkages, etc.) from the perspectives of different stakeholders of their needs or of the system as a whole. These assessments provide data for answering questions of how to tailor or adapt innovations and dissemination strategies to particular settings—a critical step in the transportability of innovations (Schoenwald & Hoagwood 2001). Assessment of needs must explore not only what respondents think they need and need to know; it must also explore what they *do*, as current practices reveal that what providers do is more relevant to respondents' needs than an isolated assessment of knowledge (Pecora, 1991). A familiar question that plagues those conducting needs assessment: the wish to explore not just “perceived”

needs, presumed to be subjective, but “real” needs, which may have an important impact on the desired outcomes of innovation (Mendel et al. 2008). However, the concept of need and its assessment is a complex issue and available assessment measures vary considerably in their content, format and aims (Crea, Crampton, Knight, & Paine-Wells, 2011).

The body of literature related to organizational needs assessment explores the use of standardized instruments as a means of offering a systematic approach to this research (Henry, Richardson, Black-Pond, Sloane, Atchinson, & Hyter, 2010). For example, Glisson, Landsverk, Schoenwald, Kelleher, Hoagwood, Mayberg, and Green (2008) used the Organizational Social Context (OSC) scale to assess the association between organizational climate and service outcomes in the child welfare system. The scale measures dimensions of organizational social context that inhibit or contribute to the implementation of effective services and employs a 6-point Likert response scale (where 1 = disagree strongly and 6 = agree strongly). Questions focus on topics such as caseworkers' flexibility in case management; input into key management decisions; and amount of bureaucratic rules, regulations, and red tape.

An additional example of a standardized scale used in organizational needs assessment is the Texas Christian University Organizational Readiness for Change (ORC: Lehman, Greener, & Simpson, 2002) is a 115-item Likert-type measure of organizational functioning and readiness to change. It represents four major areas: Motivational readiness, personality attributes of program leaders and staff, institutional resources and organizational climate. The scale measures include questions related to perception of

program strengths and weaknesses; adaptability, and clinical orientation; use of e-mail and Internet; and openness to change. Lehman et al. (2002) described the ORC's development, including rationale, and structure, as well as its preliminary psychometric properties.

Kimberly and Cook (2008) in a review of organizational measures related to implementation of new practices and technologies acknowledge that the consistent use of standardized measures allows exploration of areas of convergence and divergence. However, the authors also caution that the very availability of the measures often means that they may be utilized without regard to relevance to either the setting or group in which they are administered.

The exploratory needs assessment presented here is more circumscribed in scope and deals pointedly with analysis of secondary data obtained from a self-administered, cross-sectional, WWW-based survey distributed in 2012 by the National District Attorneys Association Criminal Justice Therapy Animal Task Force (hereafter referred to as the Task Force survey). The purpose of this non-experimental project, initially, was to rapidly and inexpensively gain information to identify specific needs of agencies including, or considering the inclusion of animals in the criminal justice system (See Appendix A).

The use of surveys in broad, general approaches to overall program development, as part of program planning and evaluation, have been reported in literatures focused on the dissemination of evidence-based practice in child welfare (Kolko, Cohen, Mannarino, Baumann, & Knudsen, 2009), and in the literature related to organizational innovation

implementation (Schoenwald, Chapman, Kelleher, Hoagwood, Landsverk, et al. 2008). In a meta-analysis of organizational implementation research Saunders (2012) cited a number of studies in which researchers constructed site-specific surveys (See for example Crea, Crampton, Abramson-Madden, & Usher, 2008; Darlington, Feeney, Rixon, 2005). Moreover, survey design texts highlight a clear trend toward the use of self-completed questionnaires, alongside the increasing popularity of Web-based surveys (Dillman 2009).

The survey used in this study was developed by the members of the Criminal Justice Therapy Animal Task Force (hereafter referred to as Task Force). Members of the Task Force were selected by the Deputy Director of the National Center for Prosecution of Child Abuse, a program of the NDAA. The Deputy Director based membership selection on past working experience with individuals from a similar project conducted by the American Humane Association in 2009, and on recommendations for additional members made by those individuals. The Deputy Director reported that she, "tried to select a group that was both hands on, theoretical, legal, and/or tied to a national organization for setting new policy in this area." (Phillips, personal communication, 2011).

Expert consensus methods (i.e. nominal group technique), have been applied to problems in social services, education, government, and industry (Jones & Hunter, 1995). In the context of human services the method has most commonly been used to examine the appropriateness of clinical interventions (Mintz, Nissen, Anderson, et al., 2001), but has also been applied in education and training (Facione & Facione, 1996) and in practice

development (Kolko, et al. 2009). The method gathers information from relevant experts (usually 9-12 in number) and can be employed when there are concerns that information currently available may be dominated by one agency or by coalitions representing vested interests (Jones & Hunter, 1995).

The twelve member Task Force included individuals who represented volunteer therapy dog registration programs (i.e. Pet Partners); national and local not-for-profit organizations providing animal-assisted therapy services; representatives from law enforcement and district attorneys; and staff of child advocacy centers. All members of the Task Force had either direct experience in including dogs in some aspect of criminal justice proceedings or in managing volunteers who handled animals in criminal justice settings.

The current study reports on analysis of responses from the Task Force survey questions related to what is important to agencies in terms of incorporating dogs and responses from survey questions related to information about perceived barriers to the inclusion of dogs in agency services. The analysis of what is important to the agency consisted of analyzing responses to survey questions about the activities that could or did include dogs, questions regarding training and credentialing of individuals handling dogs and dog screening. To identify potential barriers this study made use of survey questions that provided responses regarding concerns specifically related to the presence of dogs in criminal justice settings (i.e. concerns about allergies) as well as responses regarding interdisciplinary organizational concerns. The study presented here examines the

quantitative aspects of survey responses in addition to a qualitative analysis of responses participants provided in the comments section of the Task Force survey.

### **Participants**

Participation was solicited by sending an email message, in which a link to the Web based survey was included, was sent to all email addresses contained in the NDAA system of professionals and advocates associated with child abuse or crimes where victims go on the witness stand. The survey was sent (in one round) to a total of 9339 addresses consisting of NDAA members (2277), board members (91), newsclip recipients (722), listservs of child abuse (2882), animal abuse (595), domestic abuse (4715) and attendees of the NDAA 2011 conference (120). No demographic information regarding the respondents (i.e., gender, socioeconomic status, years on the job, or pet ownership status) was obtained. The NDAA provided the researcher with a data file (EXCEL) of all responses in which all identifying information was removed from the responses (i.e. names and email addresses). The use of secondary data provided by the Task Force survey was approved by the Institutional Review Board of the University of Denver. A total of 295 surveys were 'returned'.

### **Analysis**

The study uses quantitative and qualitative analysis methods in keeping with recommendations by scholars such as Kimberly and Cook (2008) who argue that researchers interested in understanding the factors that influence the implementation of new practices and technologies in mental health should take advantage of the strengths of both methods. The choice of this strategy was also informed by implementation literature which suggest that analysis strategies that take into account both quantitative and

qualitative data may indicate directions for further study, reveal features of the data that are not immediately apparent through quantitative analysis alone, (Schreiber et. al., 2006), and reveal meaningful, substantive differences between the various professionals involved in complex organizations (Crea et al., 2008).

For example, Krysan (1999) found, in a mixed method study of a health services, that survey respondents were different in terms of their understanding of the questions being asked compared to what the survey researchers understood the questions to ask. Similarly, in a study conducted by Wittink, Barg, and Gallo (2006) of the concordance and discordance between physicians and patients about depression status, the authors reported that the quantitative data measured by standardized scales did not differentiate patients whose physicians rated them as depressed from those whose physicians did not rate them as depressed. Qualitative themes, however, identified a typology of differing emotions and feelings by patients regarding depression.

Moreover, in a study on organizational change in child welfare settings Ward, Maher, Marcynyszyn, Ellis, and Pecora, (2011) observe that the potential gains or losses for various stakeholders can be substantial; therefore research on the development and application of new practices and technologies must be as relevant as it is rigorous. The authors note that research approaches to organizational change should consider the use of mixed methods to better fit the uneven and flexible processes of how most large, complex public social welfare programs are developed and implemented.



**Close-ended item analysis strategy**

The Task Force survey was comprised of ten (10) questions with unordered response categories, including an additional response category of 'other' for questions 1, 2, and 4-8. (See Table 1).

Table 1:	
<i>Task Force Survey Questions</i>	
<u>Question Number</u>	<u>Question Text</u>
Q1.	Where do you work?
Q2.	Does your agency or office currently use the services of an animal to help crime victims? If yes, indicate the animal(s). If no, please proceed to question 7.
Q3.	How many animals assist your agency? _____.
Q4.	Do the animals have a handler or owner? If yes, please pick appropriate choice.
Q5.	Are the animals trained and registered/certified with an organization? (check all that apply).
Q6.	In what areas do the animals provide assistance? (check all that apply).
Q7.	If you are currently incorporating an animal/handler team, or are interested in doing so, please tell us what is important to your office (check all that apply).
Q8.	If your agency has not considered or included animals into your work, please explain why (check all that apply).
Q9.	Do you believe it would be valuable to have the assistance of a animal to help crime victims?
Q10.	NDAAs are part of a task force that will be creating additional standards to enhance the standards set forth in Therapy Animals Supporting Kids (TASK) Program. Would you be interested in receiving a copy? If yes, please provide your email address.
Q11.	If we have additional questions regarding your existing program, may we contact you? If yes, please enter your email address.
Q12.	Comments.

The majority of survey questions offered between 3-11 response items; for questions 5, 6, 7 and 8 respondents were directed to 'check all that apply'. Questions at the end of the survey which asked respondents to supply an email address were not

included in the data file. The survey contained one branch in which respondents who indicated that animals were not currently included in their agency or organization (checked 'no' for Q2), were directed to go to Q7. Thus, not all respondents answered all questions, and multiple responses were possible for questions 2 – 9.

Data cleaning consisted of identifying missing data and coding responses to questions 2-9 as dichotomous variables. For example, Q6, "In what areas do the animals provide assistance? (check all that apply)" contained nine possible choices: A. Volunteer (from outside your agency); B. Social Worker (Staff person); C. Attorney (Staff person); D. Law Enforcement (Staff person); E. Forensic Interviewer (Staff person); F. Victim Advocate (Staff person); G. Administrative (Staff person); H. Other; and F. No . Each choice was coded as either "1" indicating that the response item was selected, or "0" indicating the response item was not selected. Missing data was coded as "99".

For questions in which the respondent selected the "other" item, information in the comments section was used to determine if the response could be recoded into any of the listed response items. For example, one case in which "other" was selected as a response to Q1, "Where do you work", review of the Comments section revealed that the specific agency name was included. An Internet search for the agency, by the researcher, provided information that allowed the researcher to re-code the response as "Children's Advocacy Center". This process was used to examine and re-categorize 'other' selections throughout the survey. A total of twenty-seven (27) "other" items were re-categorized using this method.

For questions Q1, and Q2, and Q4 response items were examined and groups were created where possible to improve analysis options. For example, Q2: "Does your agency or office currently use the services of an animal to help crime victims?" Respondents either included an animal or not, thus responses were grouped according to whether the respondent reported the presence of an animal or not. Table 2 illustrates

Table 2: <i>Survey Questions, Responses, and Aggregated Group Names</i>		
<u>Survey Question</u>	<u>Included Response Items</u>	<u>Group Names</u>
<u>Q1. Where do you work?</u>	A. District Attorney's Office C. Law Enforcement Agency D. Courthouse (Administration) E. Courthouse (Judiciary) G. Other**(if answer indicated a legal services work setting).	Legal Service
	B. Children's Advocacy Center F. Child Protection Agency G. Other**(if answer indicated a victim services work setting)	Victim Service
<u>Q2. Does your agency or office currently use the services of an animal to help crime victims? If yes, indicate the animal</u>	A. Dog B. Cat C. Other	Has Dog
	D. No	No Dog
<u>Q4. Do the animals have a handler or owner?</u>	A. Volunteer (from outside your agency) F. Other **(if answer indicated respondent served as a volunteer in a work setting listed above)	Volunteer Handler
	B. Social Worker (Staff person) C. Attorney (Staff person) D. Law Enforcement (Staff person) E. Forensic Interviewer (Staff person) F. Victim Advocate (Staff person) G. Administrative (Staff person) H. Other **( answer indicated respondent served as a staff member in a work setting listed above).	Staff Handler

survey questions for which group categories were created and lists the response items aggregated into each group. Cases which contained "other" as a response item were assigned, where possible to an appropriate group, as described above. Unassigned

"Other" responses (23) were excluded from the analysis. Once all responses were coded the data were entered into SPSS (V.18) for analysis.

In addition, to further define respondent choices, multiple response categorical variables (MRV) were created for survey questions Q4 (Handler Type), Q6 (Roles for Dog), Q7 (Important Factors), and Q8 (Barriers). The procedure creates a single summary table of counts and percents based on several variables that may be selected as responses to one question (Bilder & Loughin, 2004). The single table combines all possible variables, rather than a number of separate tables. Analyses using MRV are presented as "percent of cases" as this represents the percentage of respondents who selected each item. Thus, columns do not add up to 100% as respondents may chose more than one item per question. This procedure provided a more layered presentation of the data, reflecting the interplay between variables.

Descriptive statistics consist of frequency and percentage distributions were computed for all response items in each question. Cross tabulations were computed for comparison of the frequencies between multiple response variables and the work setting in order to address each research question. Where possible, further inferential analysis through the use of *t*-tests, and analysis of variance (ANOVA) were conducted to better understand the variance of responses (Singleton & Straits, 2005). However, even with data aggregation, the large amount of missing data made it difficult to carry out more sophisticated analysis. Thus, the analysis is presented here with the understanding that, although some significant results were found, generalizations made from this data should

be interpreted with extreme caution. Confidence intervals were not estimated for these findings due to the nominal nature of the data so generalizations are limited to the data.

### **Open-ended item analysis strategy**

Responses included in the 'Comments' section (Q12) were used to explore study question 1: What are the perceived benefits of implementing programs with dogs as judiciary aids throughout criminal justice? Responses were analyzed via ATLAS-ti (V7.0). The constant comparative method described by Lincoln and Guba (1985) was used to identify how respondents in this particular sample think about, classify, and perceive different aspects of including dogs in the forensic processes (i.e., emerging themes, patterns, or trends).

Initially, the data was examined to identify and name broad categories. After this initial step in the analysis, the categories were further identified and specified from the data representing the varieties exposed by the voices of the participants (Creswell, Klassen, Plano Clark, & Smith, 2011). At this stage consistency was tested by coding a clean version of the first 50 responses that were initially coded in order to decrease researcher bias. This analysis was compared to the earlier version to identify differences in coding that may have developed. Differences between the versions were reconciled by conferring with a colleague who was not familiar with the literature on criminal justice processes or animal-assisted interventions (Lincoln & Guba, 1985; Willms, Best, Taylor, 1992).

Once all coding was completed Atlas.ti was used to quantify the themes and the output was used to display the total number of researcher-identified quotes in the "Has

Dog" and "No Dog" group data, respectively, alongside of the count of quotes for each theme.

Because child maltreatment investigations are led by a multidisciplinary team, the perception of what is being asked in the questions presented may vary widely. In addition, although a number of the human-animal interaction studies cited above contain both qualitative and quantitative findings (Ceislak, 2001; Dickstein, 1998; Struk, & Brady, 1998), none of the studies have explored the links between these two types of data. Thus the intersection between the qualitative and quantitative data available for this study was reasoned to be an important point in which to examine this new practice.

## **Chapter Four: Results**

### **Overview**

Assessment of needs must explore not only what respondents think they need and need to know; it must also explore what they do, as current practices reveal that what providers do is more relevant to respondents' needs than an isolated assessment of knowledge (Pecora, 1989). The results of this needs assessment are presented as an integration of quantitative findings with qualitative findings to give voice to the experiences and concerns of providers in the child maltreatment system. A description of the development of qualitative themes and descriptive statistics are presented first. This descriptive section is followed by the presentation of results for the quantitative and qualitative analyses and are organized by research question (1-4).

### **Development of qualitative themes**

From the total number of survey responses (N=295), 129 responses were reported for Q12: Comments. These comments ranged from reactions to challenges encountered in including dogs in the respondent's work setting to descriptions of the respondent's experiences including dogs, and for the most part either advocated for the use of dogs or showed an interest in adopting this practice. The constant comparative method of analysis described by Lincoln and Guba (1985) was used to identify emerging themes, patterns, or trends. Coding the comments into themes enhances the ability of the survey data to

answer the study questions by providing depth and detail to the categorical nature of the quantitative data.

In the open coding phase of analysis initial categories were utilized to segment information. During this phase broad categories were identified and attention was given to the breadth as well as depth of information contained in the quotes. Initial categories included *knowledge seeking, adoption, barriers, important, and beliefs* and followed the focus of survey questions. Early categories and their descriptions are contained in Table 3.

Table 3: <i>Open Coding Categories</i>	
<u>Category</u>	<u>Category Description</u>
1. Knowledge seeking	Quotes expressed need for general or specific information regarding the practice of including dogs in the criminal justice setting.
2. Adoption	Quotes provided information about the respondent's process of obtaining or attempting to include dogs or the process of securing credentials for a dog.
3. Barriers	Information about problems encountered in working with a dog, quotes about limitations to existing programs as well as continuing obstacles.
4. Important	These quotes contained statements about processes or policies reported as required by or discussed in the respondent's agency.
5. Beliefs	Quotes in this category consisted of generalized statements about generalized benefits of contact with animals. Most often these quotes contained exclamatory language and punctuation.

In the axial coding phase, the researcher identified the *adoption* category as the central phenomenon as it held the most conceptual interest and was most frequently discussed in the open-ended section of the survey. Thus, *adoption* of the innovative



practice of including dogs in criminal justice was an important causal condition related to perceptions contained in the other categories. Furthermore, conceptualization of *adoption* as the central phenomenon enabled the researched to explicate the causal conditions and context and intervening conditions for this phenomenon (Creswell, 1998). From this perspective, the researcher re-examined the quotes to explore the inter-relationship of categories and reorganized the quotes based on the emerging process of *adoption* as revealed by the data. A total of five (5) re-conceptualized themes were identified as common to the experience of trying to, or already including a dog in criminal justice processes. The figure (Figure 3), below, represents the interrelationship of the central phenomenon, *adoption*.

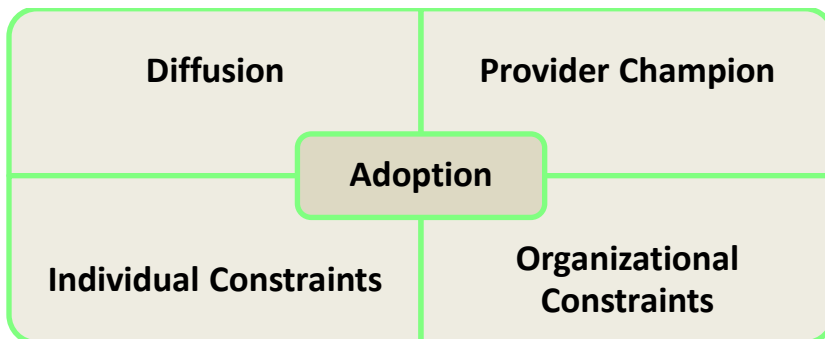


Figure 3: Influences on Adoption

The theme labels and descriptions are listed in Table 4. Theme labels are informed by innovation literature which acknowledges that the nature of the implementation of innovations may be dependent on the perspectives and experiences of the given stakeholder group (Aarons & Palinkas, 2007). From the innovation literature, *adoption* is the end result of the innovation-decision process in which the organization determines to make full use of an innovation as the best course of action (Rogers, 2003).

The innovation-decision process is preceded by *diffusion*, defined as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (Rogers, 2003,pg.12.) Diffusion consists of information-seeking and information-processing activities. The process of innovation in organizations is most often supported and encouraged by a charismatic individual who throws her or his weight behind an innovation in order to overcome organizational indifference or resistance to new ideas. In other words, innovations are championed through the organizational system. Thus, the *provider champion* theme reflects voices supporting the role of dogs in the child welfare system. The themes of *organizational constraints* and *individual constraints* parse out the different barriers to innovation *adoption*.

Table 4.	
<i>Theme Labels and Description</i>	
<u>Theme Labels</u>	<u>Label Description</u>
1. Adoption	Quotes express what is important and describe how dogs were included or could be included within the respondent's unique setting.
2. Diffusion	Quotes express need for or lack of basic knowledge or need for training about the inclusion of dogs as judiciary aids.
3. Provider Champion	Quotes which express belief, passion, or certainty that the presence of animals is associated with some form of human benefits in the criminal justice process or in more general terms.
4. Organizational Constraints	Quotes focused on contextual factors related to system, structural, or policy influence on the inclusion of dogs or the expansion of an existing program.
5. Individual Constraints	Quotes focus on organizational climate factors as well as personal needs, capacities and expertise which influence the inclusion of dogs or the expansion of an existing program

*Organizational constraints*, are contextual barriers imposed by the organization (i.e. building policies, budget considerations, etc.). In contrast, *individual constraints* are

barriers that impact individuals such as time, personal finances, organizational climate, or personal motivation. Glisson and James (2002) describe organizational climate factors as including the attitudes and perceptions that service providers bring to the agency and argue that these play an important role in program implementation.

To better address the research questions concerning the ways in which provider perceptions may differ based on whether they were already including a dog or if they were still considering the practice the researcher separated the quotes within each theme according to the respondent's answer to survey question 2 (Does your agency or office currently use the services of a dog...). Four groups (or voices) were identified with this

Table 5: <i>Qualitative Respondent Groups</i>	
<u>Group Name</u>	<u>Group Description</u>
Has Dog	Respondents reported working in an organization/agency listed in the survey and included a dog in services.
No Dog	Respondents reported working in an organization/agency listed in the survey and did not include a dog in services.
Allied Organizations	Made up of individuals working in human service settings concerned with child welfare & family violence but not directly involved in the criminal justice processes (i.e. sexual assault & domestic violence programs, mental health treatment agencies & hospitals).
Animal Organizations	Individuals involved in animal focused settings such as veterinary medicine and animal shelters. (The Task Force survey was sent to organizations involved in animal abuse).

strategy, group names and descriptions are presented in Table 5. Comments from respondents in the Has Dog and No Dog groups are the primary voices analyzed in this study as these individuals have direct experience in the criminal justice system.

Comments made by respondents in the Has Dog group are denoted with the letter D and those made by respondents in the No Dog group are denoted by the letters ND.

The voices of respondents from Allied Organizations are included where relevant as individuals in this group may provide services to victims or their families. Statements made by respondents in the Allied Organization group are denoted by the letters AO. Comments from the Animal Organizations group are not used in this study.

### **Descriptive statistics**

An invitational email, containing a link to the web-based NDAA Task Force survey, was sent (in one round) to a total of 9339 email addresses. The survey was accessed by a total of 295 participants. No reasonable response rate can be calculated as a code was not required to access the Web-based survey, and the researcher is aware of at least two instances in which the email was forwarded to individuals who were not NDAA members. VanSelm and Jankowski (2006) observe that a challenge with Web-based surveys is the impossibility of calculating the response rate as "There is no way in which to know how many individuals might have seen the survey or its links but declined to participate. Only the number of completed surveys is known and not the number of refusals," (pg. 446).

No personal information was obtained from the NDAA directors or about staff or members; thus, demographic data are not reported. Of the 295 individual responses to the survey, 7 respondents answered all appropriate questions. Total responses and response percentages, rounded to the nearest tenth, were tabulated for each question, and each response item for each question. These values are summarized in Appendix B.

The frequency distribution of responses to Q1: Where do you work, revealed the array of respondents across five organizations and agencies (N = 295). The response items for Courthouse (Administration) and Courthouse (Judiciary) were collapsed into a

single "Court" category. The frequencies and percentages are illustrated below in Table 6. The majority of respondents reported working in a district attorney's office (DA) (44.4%) or in a children's advocacy center (CAC) (16.6%). There were 61 (20.7%) responses coded as 'other', which included respondents not directly involved in child protection and forensic work (such as those in working in domestic violence shelters or animal shelters and veterinarians).

Table 6: <i>Frequency Distribution of Work Settings</i>		
<u>Q1: Where do you work? "Other" excluded)</u>	<u>Frequency</u>	<u>Percent</u>
1. District Attorney's Office	131	44.4%
2. Children's Advocacy Center	52	16.6%
3. Law Enforcement Agency	30	10.2%
5. Court <sup>a</sup>	7	2.4%
6. Child Protection Agency	14	4.7%
7. Other	61	20.7%
Total	295	100.0%

<sup>a</sup> Court (Admin. & Judiciary Combined)

A total of 254 (N = 254) responses were reported for Q2: Does your agency or office currently use the services of an animal to help crime victims. Frequency distributions are summarized in Table 7. A total of 54 respondents reported including

Table 7: <i>Frequency Distribution of Respondents Currently Including an Animal</i>		
<u>Q2: Does your agency or office currently use the services of an animal to help crime victims?</u>	<u>Frequency</u>	<u>Percent</u>
No Dog	200	78.70%
Has Dog	54	21.30%
Total	254	100%

animals. Only 5 respondents reported including cats, and these respondents also reported including dogs; four respondents reported the inclusion of rabbits and one respondent reported including fish in a fish tank. Therefore, for simplicity, and because the majority of animals reported on in this survey are dogs, the results and subsequent discussion will use the term dogs to include any animal reported. Also, where variables are grouped according to Has Dog/No Dog the results are based on the number of respondents including an animal not on the number of animals.

A total of 61 responses were reported for Q4: Do the animals have a handler or owner? While the wording of the question asked respondents to “pick appropriate choice,” some respondents picked more than one type of handler, thus the following multiple response table is based on an N of 61 rather than 54. As noted in the Methods section, the column responses percent indicates what percentage of the total number of responses represented by each item choice (i.e. As a volunteer) while the final column, percent of cases, indicates what percentage of respondents chose each item. The majority of settings with dogs use staff members as handlers (a total of 65.6% of responses), though some settings use both volunteers and staff handlers. Frequency distributions are summarized in Table 8.

Table 8:			
<i>Frequency Distribution of Handler Types</i>			
Q4: Do the animals have a handler or owner? (If "No" skip to Question 7).	Responses		Percent of Cases
	<u>N</u>	<u>Percent</u>	
A: Volunteer (from outside your agency)	21	34.4%	41.2%
B: Social Worker (Staff person)	7	11.5%	13.7%
C: Attorney (Staff person)	3	4.9%	5.9%
D: Law Enforcement (Staff person)	7	11.5%	13.7%
E: Forensic Interviewer (Staff person)	6	9.8%	11.8%
F: Victim Advocate (Staff person)	9	14.8%	17.6%
G: Administrative (Staff person)	8	13.1%	15.7%
Total	61	100%	119.6%

A total of 138 responses were reported for Q6: In what areas do the animals provide assistance? Respondents reported where dogs worked (or the roles for dogs within an agency). The frequency distribution is summarized in Table 9.

Table 9:			
<i>Frequency Distribution Roles for Dogs</i>			
Q6: In what areas do the animals provide assistance?	Responses		Percent of Cases
	<u>N</u>	<u>Percent</u>	
A: As a greeter for victims	39	28.3%	70.9%
B: In therapy sessions	23	16.7%	41.8%
C: In forensic interviews	21	15.2%	38.2%
D: During medical examinations	5	3.6%	9.1%
E: During court preparation	26	18.8%	47.3%
F: During courtroom testimony	15	10.9%	27.3%
G: During non-courtroom testimony (depositions, etc.)	9	6.5%	16.4%
Total	138	100.0%	250.9%

Respondents reported more than one setting in which dogs worked. For example, the item "a greeter for victims" was selected 39 times, or 28.3% of the total number of items selected and 70.9% of respondents reported that dogs were included as greeters.

Therefore it appears that in this sample, dogs are included in multiple settings throughout the criminal justice system.

A total of 948 responses were reported for Q7: If you are currently incorporating an animal/handler team, or are interested in doing so, please tell us what is important to your office. The number of responses reflects the multiple number of items reported by respondents. Note that the highest number of respondents (181) reported "animal has been tested around children" as an important factor for including a dog in their agency. Although this item is only 19.1% of the total number of items selected it was selected by 84.2% of respondents. The frequency distribution is summarized in Table 10.

Table 10: Frequency Distributions for What is Important for Including Animals			
Q7: If you are currently incorporating an animal/handler team, or are interested in doing so, please tell us what is important to your office.	Responses		Percent of Cases
	N	Percent	
A: Animal/handler team that is trained and registered with a national organization	109	11.5%	50.7%
B: Animal/handler team that has received additional training on working in the criminal justice system	126	13.3%	58.6%
C: Animal that has been tested around children	181	19.1%	84.2%
D: For accessibility, an animal that is allowed to work 'off leash' with victims and agency staff	111	11.7%	51.6%
E: For safety, an animal that is always 'on leash' with his/her handler	39	4.1%	18.1%
F: A team of animals of different breeds and temperaments to be matched to each victim's needs	60	6.3%	27.9%
G: Animal/handler team that can help at no cost	157	16.6%	73.0%
H: Animal/handler team that comes with liability insurance	130	13.7%	60.5%
I: More than one animal/handler team to work with your office	35	3.7%	16.3%
Total	948	100.0%	440.9%

A total of 382 responses were reported for Q8: If your agency has not considered or included animals into your work, please explain why. Budget constraints were reported by 98 respondents and represents 25.7% of all items selected and was reported by 60.9%



of respondents. Note that 44.1% of respondents reported "no teams in the area" as a barrier. The frequency distribution is summarized in Table 11.

Table 11:			
<i>Frequency Distributions of Barriers to Including Animals</i>			
Q8. If your agency has not considered or included animals into your work, please explain why.	Responses		Percent of Cases
	N	Percent	
A: Budget constraints	98	25.7%	60.9%
B: Opposition from office management	26	6.8%	16.1%
C: Opposition from risk management/liability insurer	23	6.0%	14.3%
D: Opposition from judiciary	15	3.9%	9.3%
E: Opposition from defense attorneys	11	2.9%	6.8%
F: No animal/handler teams in the area	71	18.6%	44.1%
G: Concerns about safety	43	11.3%	26.7%
H: Concerns about allergies	48	12.6%	29.8%
I: Concerns about appellate issues	19	5.0%	11.8%
J: Fear/dislike of animals in the workplace	28	7.3%	17.4%
Total	382	100.0%	237.3%

Almost half of survey respondents took the time to leave comments in the comments section (44.1% of the survey respondents). Once comments were moved into themes, as stated above, the qualitative data were quantified. Frequencies for the different themes are presented below (Table 12). Chi square analysis of differences between

Table 12:				
<i>Frequency Distribution of Qualitative Themes</i>				
Theme	Frequency	Percent	Has Dog	No Dog
Diffusion	25	22.7%	8%	92%
Provider Champion	27	24.5%	62.90%	37.10%
Individual Constraints	14	12.7%	35.70%	64.30%
Organizational Constraints	24	21.8%	29.20%	70.80%
Adaptation	20	18.2%	80.00%	20.00%
Total	110	100.0%	47	63

themes provided a clearer picture on statistical significance of the frequency of quotes for each theme compared to whether the respondent is in an organization that includes dogs or not. For example, there are a total of 47 quotes in the "Has Dog" group, of which 17 or 36.% are coded for the *individual constraints* theme and a total of 63 quotes in the "No Dog" group of which 10 or 15.9% are coded for the *individual constraints* theme.

While these percentage differences for the *individual constraints* theme from "Has Dog " to "No Dog" group are interesting, running the Chi square analysis revealed a pattern to the differences ( $\chi^2(df = 4) = 30.278, p = .000$ ). The No Dog group themes varied significantly from the frequencies of themes reported by the group that includes dogs. There was a strong practical effect size for this finding (Cramér's  $v = .525$ ). Cramer's V is the appropriate measure of effect size for any chi-square test of independence larger than 2 x 3 (Cramér, 1946).

### **Research question results:**

#### **Results for research question 1 (What are the perceived benefits of implementing programs with dogs as judiciary aids throughout criminal justice?):**

Answering this question based on survey data proved to be difficult as no survey question directly asked respondents to identify what benefits were identified or desired from including dogs. To get an idea of what might be considered beneficial, cross tabulation comparisons between the roles respondents identified for dogs and the work setting in which these roles might be included were calculated. Forty respondents reported on both questions. The results revealed that respondents who reported working in a district attorney's office primarily reported including dogs during courtroom preparation (76.2%)

or as a greeter (71.4%) or during courtroom testimony (47.6%) (Table 13). Reports that dogs were included in therapy came, primarily, from respondents working in children's advocacy centers (62.5%).

Table 13: <i>Associations Between Roles for Dog and Work Settings</i> (Percents by cases)					
Roles for Dog	WORK SETTING				
	1. District Attorney's Office	2. Children's Advocacy Center	3. Law Enforcement Agency	6. Child Protective Agency	
A: As a greeter for victims	71.4%	75.0%	50.0%	0.0%	
B: In therapy sessions	9.5%	62.5%	50.0%	100.0%	
C: In forensic interviews	42.9%	43.8%	0.0%	0.0%	
D: During medical examinations	0.0%	25.0%	0.0%	0.0%	
E: During court preparation	76.2%	25.0%	50.0%	0.0%	
F: During courtroom testimony	47.6%	6.3%	50.0%	0.0%	
G: During non-courtroom testimony (depositions, etc.)	23.8%	18.8%	50.0%	0.0%	
Total (n=40)	Count	21	16	2	1

Findings from the qualitative analysis enabled further exploration of this question. Comments from the theme *provider champion* (express belief, passion, or certainty that the presence of animals is associated with some form of human benefits in the criminal justice process or in more general terms) provided some insight into the perceived benefits of including a dog. Notice that the first respondent, who does not currently include dogs, identifies a specific benefit that might be derived through a program to include dogs. Conversely, many of the respondent currently including dogs are more general regarding any benefits and tend to name places the dog is encountered rather than

what benefits accrue victims or their families. Quotes beginning with ND are from respondents with no dog in the agency, with D are respondents using a dog.

ND: I have never seen dogs used for DCS. However, Kokomo Police Department, Kokomo, Indiana, has a building where children are interviewed called Tomorrow's Hope. Dogs could be used to help with anxiety levels of children and adults before and after the interview process.

ND: I think it is a great idea. There is nothing like a cat or a dog to calm a victim. Had I thought about it, I would have brought my own cats and dog (not all at once) to work to put juvenile and adult sex crimes victims at ease during the interview.

D: Animals not only participate in therapy sessions and greet victims, they also spend time with them while they are waiting for their appointment whether it be for therapy, to meet with CPS, law enforcement, for their forensic interview, or their medical. The animals also roam the halls with their handlers and visit with any and all interested victims and their family members that they encounter.

D: Having a therapy dog at our children's advocacy center has made a huge difference for the kids we work with - especially for those who are more traumatized.

D: I have a tank set up in my office with one (currently) or more baby turtles. I use it as an ice-breaker when I meet with victims.

The therapists from allied organizations provide more detail in terms of how the dogs' presence benefit clients in their settings.

AO: Domestic violence and sexual assault shelter for women and children. We have a full time adult therapist and a child therapist. We have a volunteer that brings his dog out once a month to hang out with kids. He is certified. Kids love her.

AO: I am a clinical psychologist in private practice. I have two dogs that I bring to my office and my clients love the dogs. They are real ice breakers and add both a calming effect and a humorous touch. They are not trained therapy dogs they are just my pets. The dogs help so much with children because I go from being some stranger asking questions to the neat lady who has Abby and Macy.

These comments point to an important challenge concerning the incorporation of animal-assisted interventions (AAI) in that there is no clearly defined model for such programs and goals are often so generalized that it is difficult to measure outcomes (Katcher & Beck, 2010; Wilson & Barker, 2003). The lack of understanding regarding what benefits will be realized from the inclusion of dogs is expressed through the following statement in which the respondent asks for specific protocols linked with benefits.

ND: We would be interested in a training program that will help educated agencies involved in the judicial process the benefits of, and protocols of an animal assistance program.

For the comments below which were contained in the *diffusion* and *provider champion* themes both respondents express support for the innovation albeit without agency support ("do not know if it was ever approached here" and "my office has never considered using animals"). The statements reflect the respondents' need for general information about the role of dogs in animal-assisted interventions as well as the need for more information about specific methods for including animals in the criminal justice system.

ND: Our office is not familiar with this program. We would like further information on TASK and the benefits it provides to crime victims.

ND: I am new to this position and do not know if it was ever approached here but I think this is a wonderful idea. I would love more information.

ND: I am also the PI on a grant that funds our local Child Advocacy Center (CAC). We have been in discussions about using animals during our Forensic Interviews, and then again in court.

ND: We had a CAC advocate in the past that used animals in the past and the results were wonderful. I had considered that if a kid were say prepping for court or waiting to testify a furry friend is of great comfort. This is a good thing. Maybe someday we can do it again here.

ND: my office has never considered using animals to help crime victims. I think it would be a valuable tool.

Wording such as "We have been in discussions about using animals..." and "We would like further information on TASK and the benefits it provides to crime victims." point to the organizational voice in the decision making process. These phrases reveal the formation of attitudes toward the innovation. These quotes also illustrate findings in the innovation literature which report that the innovation-decision process contains a number of steps. The decision-making unit, in this case the agency considering including a dog, first acquires knowledge of the innovation then forms an attitude about the innovation and then determines whether to adopt or reject the innovation (Rogers, 2003).

The following statements provide eye witness accounts of the way in which clients have responded. However, it is unclear if these events were singular in nature or were the results of planned interventions.

D: Several months ago, Paz provided support to a 7 year old child who had witnessed the shooting of her mother and was frightened about testifying. Paz stayed with the child at the BKFJC during the entire day prior to her court appearance. Since therapy dogs are not allowed into the courtroom, the child was provided with a picture of Paz which she held during her testimony.

D: I understand that defense attorney want to keep the dogs out of sight and judges are leery too. but the program works in spite of that. SO WORTH IT. I used Roper to de-stress as other staff members in the court house. LOVE, LOVE, LOVE this use of animals.

From these quotes the dynamic interplay between individuals and organizational structures is apparent. A seminal point in the research in organizational innovation

occurred with the recognition of the separate influences of people and structures (Zaltman, Duncan, & Holbeck, 1973). Now referred to as organizational context and organizational climate (Glisson, 2007), these quotes point to the interaction between these influences as exemplified by the emotive quality of the following quote, " I understand that defense attorney wants to keep the dogs out of sight and judges are leery too. but the program works in spite of that. SO WORTH IT."

The three quotes that follow represent the themes *adoption* and *provider champion*. Note that two of the quotes describe benefits to staff that work in the highly charged setting of child maltreatment.

D: I work at the WA State CJTC which provides training for child interviewers and am familiar with how helpful 'courthouse dogs' (as described at [www.courthouse dogs.com](http://www.courthouse dogs.com)) have been in forensic interviews and helping child victims testify. We have had such dogs and their handlers attend a number of our trainings and I've seen the videos of interviews where the dogs made all the difference.

D: We are a DA based program, and would eventually consider using them in forensic interviews and possibly in the courtroom. Our CAC is located within a building that houses CPS, and we have invited CPS workers and other team members down to pet the dogs to help alleviate their stress. We have found this to be a great way to help care for team members who are experiencing stress and vicarious trauma. We fully support utilizing animals within our CAC.



D: having worked in the past with a FBI victim witness specialist who had a therapy dog with her, I find that this is an excellent idea program. Additionally, the benefits of having a service animal in the workplace for the employee's themselves as a way to deal with the incredible amount of stress and trauma that is involved in these types of investigations / cases should be considered. I have brought the Assistance Dog in Training that I am co-raising with me to the Atlanta Internet Crimes Against Children Conference and while going to the NCMEC Child ID lab, I personally saw the benefits of having a service animal there for people to interact with and how it benefited them in reducing the stress and trauma of merely viewing sanitized files of Child Exploitation. I cannot stress enough how much of a benefit I believe that this would be for everyone involved.

The observation that the presence of dogs influenced stress levels of staff is an important one. The human-animal relationship and animal-assisted therapy literatures have referred to this phenomenon as the 'halo' effect and have encouraged research in this area (Krugar & Serpell, 2001). This finding certainly provides an added incentive to including dogs in the high stress setting of child welfare and could be an important factor in shifts in the organizational climate of these organizations (Crea et al., 2008).

***Results for research question 2 (What specific roles do professionals identify for dogs within criminal justice?):*** In order to explore this question variables related to where people and dogs were found, what types of activities (roles) dogs were included in, and who handled dogs were analyzed. To further explicate what role dogs played in different agencies, work setting responses were aggregated into the dichotomous grouped

variable, Services. (See Table 2). Within the Services variable, work settings categorized as "Legal" services included district attorney's offices, law enforcement agencies, and court (55.9%), while the categories for children's advocacy centers, and child protective agencies were aggregated and labeled as "Victims" services (21.4%).

Cross tabulation between the type of service (Legal and Victim) and response items for the MRV Roles for Dogs revealed the interrelation between those agencies which included dogs and the roles dogs filled more clearly. The contingency table below (Table 14) summarizes data for the two variables such that the differences in the way dogs are included are evident. Although legal services and victim services reported including dogs as greeters in relatively equal percentages (68.2% and 68.8%, respectively), these groups differed in other areas in which dogs were reported as working. Those working in legal settings reported including (or considering including)

Table 14:		
<i>Association Between Role for Dog and Service Type</i>		
<u>Roles for Dog</u>	<u>SERVICE</u>	
	<u>Legal</u>	<u>Victim</u>
A: As a greeter for victims	68.2%	68.8%
B: In therapy sessions	13.6%	68.8%
C: In forensic interviews	40.9%	37.5%
D: During medical examinations	0%	25%
E: During court preparation	72.7%	18.8%
F: During courtroom testimony	50.0%	6.3%
G: During non-courtroom testimony (depositions, etc.)	22.7%	18.8%
Total (n=38)	Count 22	16

dogs in courtroom preparation (72.7%) while only 18.8% of those reporting working in victim services also reported including dogs in this area. Instead, respondents working in

victims services more frequently reported including dogs in therapy sessions (68.8%) as compared to only 13.6% of those working in legal settings who selected this item.

In order to better understand "who" is working with dogs in the criminal justice setting a cross tabulation comparison was conducted between the variables Roles for Dogs and Handler Type. The contingency table (Table 15) indicates the percentage of volunteer and staff handlers involved in each of the various roles for dogs in the criminal justice system. It should be noted that the total number of respondents reporting is small (49), as only those with dogs, who answered the question where dogs work, are represented in this table.

Table 15:		<i>Association Between Roles for Dog and Handler Type</i>							(Percents by Case)
		HANDLER TYPE							
<u>Role for Dog</u>		A: Volunteer (from outside your agency)	B: Social Worker (Staff person)	C: Attorney (Staff person)	D: Law Enforcement (Staff person)	E: Forensic Interviewer (Staff person)	F: Victim Advocate (Staff person)	G: Admin. (Staff person)	
A: As a greeter for victims		61.1%	50.0%	100.0%	57.1%	100.0%	87.5%	85.7%	
B: In therapy sessions		44.4%	66.7%	0.0%	57.1%	66.7%	37.5%	42.9%	
C: In forensic interviews		33.3%	16.7%	66.7%	42.9%	100.0%	37.5%	28.6%	
D: During medical examinations		0.0%	0.0%	0.0%	14.3%	33.3%	0.0%	14.3%	
E: During court preparation		50.0%	33.3%	33.3%	57.1%	50.0%	75.0%	28.6%	
F: During courtroom testimony		27.8%	16.7%	33.3%	28.6%	16.7%	62.5%	14.3%	
G: During non-courtroom testimony (depositions, etc.)		0.0%	0.0%	0.0%	42.9%	16.7%	37.5%	14.3%	
Total (n=46)	Count	18	6	3	7	6	8	7	

Finally, a cross tabulation comparison of the variables Services, Roles for Dogs and Handler Type (Volunteer and Staff) provides some clarity regarding the reports of what dogs do and associations with either volunteer or staff handlers working in legal service settings and victim service settings. The contingency table (Table 16) illustrated the layered associations between these variables. The data reveal that volunteer handlers in legal settings primarily included dogs in courtroom preparation (85.7%) and courtroom testimony (57.1%) but did not include dogs in medical exams (0%).

Table 16:			
<i>Association between Roles, Service, and Handler Type</i>		<i>(Percents by cases)</i>	
		<b>SERVICE</b>	
<u>Roles for Dog by Handler Type</u>		Legal	Victim
Volunteer Handlers	A: As a greeter for victims	42.9%	100.0%
	B: In therapy sessions	0.0%	66.7%
	C: In forensic interviews	42.9%	33.3%
	E: During court preparation	85.7%	33.3%
	F: During courtroom testimony	57.1%	0.0%
	<u>Count</u>	7	3
Staff Handlers	A: As a greeter for victims	86.7%	75.0%
	B: In therapy sessions	13.3%	66.7%
	C: In forensic interviews	40.0%	50.0%
	D: During medical examinations	0.0%	25.0%
	E: During court preparation	73.3%	25.0%
	F: During courtroom testimony	40.0%	8.3%
	G: During non-courtroom testimony (depositions, etc.)	40.0%	16.7%
Total ( <i>n</i> =37)	<u>Count</u>	15	12

Interestingly, staff handlers working in legal settings selected including dogs in court preparation equally to volunteer handlers (73.3%) , but reported including dogs as a greeter at nearly double the percentage of volunteer handlers (86.7%). In addition, staff handlers working in legal settings included dogs in activities related specifically to these

settings, such as during court preparation (73.3%) and courtroom testimony (40%) and during forensic interviews (40%).

Staff handlers working in victim services also included dogs during forensic interviews (50%), court preparation (25%), and during courtroom testimony (8.3%). However, staff handlers in victim services report including dogs in the roles of greeter and in therapy (75% and 66.7%, respectively). Volunteer handlers working in victim services primarily included dogs in the roles of greeter (100%) and in therapy (66.7%). Staff handlers in both legal settings and victims services included dogs in a wider variety of roles than those reported for volunteer handlers. Thus, from these data, it would appear that volunteers participate in fewer roles with dogs than staff handlers in either setting. However, in this sample, the role of "greeter" is the most commonly selected role for including dogs. The qualitative analysis also supports these findings and have been described above. Moreover, the following statements illustrate the complexity of systems involved in criminal justice practices and provide insight into staff struggles, not only between colleagues but also in developing cooperation with management. In the first statement it is not clear if the respondent is referring to "management" in terms of staff and program supervisions or in terms of building management.

ND: I work in a satellite office in the Shasta Family Justice Center. We have 8 agencies represented in one office building. At our meeting we have discussed having therapy animals present to assist with crime victims and children but have not seemed to agree on the correct avenue to provide this service. The main

concern of management has been that a therapy animal must be fully trained for the types of guests we have in our office.

ND: The main reason this type of program hasn't been considered in our area is a lack of understanding/knowledge about what the program can do and how it can be implemented.

Thus, the quantitative analysis revealed that although most providers identified multiple roles for dogs, the rate at which volunteers and staff report these roles differs. Qualitative findings were similar in that respondents indicated lack of knowledge in regards to the roles for dogs and also reported challenges to determining what dogs would do in different settings. Furthermore, as reported in results for question 1, above, respondents appear to identify roles for dogs within the scope of their profession (i.e. legal staff reported roles associated with legal processes). Although this is to be expected, this result highlights findings in innovation literature that suggest that although the complex system of child welfare requires interprofessional coordination and cooperation explicit mechanisms for the development of integrated services is frequently lacking.

***Results for research question 3 (What are potential barriers to the implementation of dogs as judiciary aid programs?):*** Since the survey instructed agencies incorporating dogs to skip Question 8 about the barriers to including dogs, the quantitative data analysis is based only on agencies without dogs.

A summary of the barriers perceived by different work settings is provided in Table 17. Note that budget constraints are the most widely reported barrier across all agencies, except child protection agencies where a higher percentage of respondents (86.7%) selected the lack of available teams as a barrier.

Table 17:		<i>Association Between Barriers to Including Animals and Work Setting (Percents by cases)</i>					
		WORK SETTING					
<u>Barriers to Including Animals</u>		1. District Attorney Office	2. Children's Advocacy Center	3. Law Enforcement Agency	5. Court	6. Child Protection Agency	
A: Budget constraints		64.7%	56.7%	52.6%	80.0%	42.9%	
B: Opposition from office management		20.6%	26.7%	0.0%	0.0%	14.3%	
C: Opposition from risk management/liability insurer		10.3%	3.3%	26.3%	20.0%	28.6%	
D: Opposition from judiciary		10.3%	10.0%	0.0%	0.0%	0.0%	
E: Opposition from defense attorneys		8.8%	3.3%	0.0%	20.0%	0.0%	
F: No animal/handler teams in the area		32.4%	50.0%	42.1%	80.0%	85.7%	
G: Concerns about safety		26.5%	26.7%	36.8%	0.0%	28.6%	
H: Concerns about allergies		27.9%	30.0%	47.4%	20.0%	28.6%	
I: Concerns about appellate issues		13.2%	16.7%	5.3%	0.0%	0.0%	
J: Fear/dislike of animals in the workplace		16.2%	26.7%	21.1%	0.0%	14.3%	
Total (n=129)	Count	68	30	19	5	7	

A second cross tabulation of the respondent's work settings dichotomized into legal and victim services with perceived barriers provides more clarity regarding the association between barriers to including dogs and the agencies in which respondents work. As above, the responses reflected in this contingency table (Table 18) are from those who do not include dogs. Note that having no animal/handler teams in the area is

reported as a barrier more frequently for those reporting working in legal services (50%) as compared to only 30.3% of those working in victim services. It is also important to note that 63.6% of respondents working in victim services selected concerns about allergies and 42.4% selected concerns about safety as barriers, while fewer than 15% of respondents working in legal services reported concerns about allergies and less than 20% reported concerns about safety.

Table 18:  
*Association Between Barriers to Including Animals and Service Type*  
(Percents by cases)

<u>Barriers to Including Animals</u>	<u>SERVICE</u>	
	<u>Legal</u>	<u>Victim</u>
A: Budget constraints	63.5%	60.6%
B: Opposition from office management	14.4%	24.2%
C: Opposition from risk management/liability insurer	7.7%	27.3%
D: Opposition from judiciary	10.6%	9.1%
E: Opposition from defense attorneys	7.7%	6.1%
F: No animal/handler teams in the area	50.0%	30.3%
G: Concerns about safety	18.3%	42.4%
H: Concerns about allergies	14.4%	63.6%
I: Concerns about appellate issues	10.6%	15.2%
J: Fear/dislike of animals in the workplace	12.5%	30.3%
Total (n=137)	Count 104	33

In order to explore whether the type of agency made a difference in the number of barriers reported, ANOVA was used to compare the number of barriers perceived by work setting. Although respondents who worked in law enforcement agencies reported the most barriers (mean of 2.47 (SD 1.43) out of a possible 10) and those working in the courts reported the fewest barriers (mean of 1.86 (SD 1.07)), calculation of a one way ANOVA found no statistically significant difference in the number of barriers reported



between the five work settings ( $F(4, 146) = .277, p = .893$ ). Similarly, calculation of a  $t$  test of independent means between work settings dichotomized into legal versus victims services and barriers was not statistically significant ( $t(149) = .021, p = .916$ ).

Although findings from the quantitative data provided a view towards the number of barriers encountered by those currently not including dogs; this data analysis did not reflect barriers that might be involved for respondents who currently include dogs, due to the wording of the question in the survey. However, after analysis of the qualitative comments, it is posited that even the agencies currently using dogs have encountered barriers that are in fact preventing expansion of the program or threaten long-term inclusion of the program.

Qualitative data was explored to elucidate those barriers that may be preventing program implementation. The comments, below, are representative of both *provider champion* and *organizational constraints* themes. These comments exemplify the challenge of recognizing the potential benefits of including dogs and at the same time acknowledging the presence of barriers such as misleading or inaccurate terminology. Quotes represent the voices of members of both the Dog and No Dog group.

ND: Our office is rural Alaska (meaning off the road system). There is limited office space here and our landlord is opposed to animals in the workplace.

ND: Child distracted during an evaluation is a concern by management. We have taken info to our DA gathered from [courthouse dogs.com](http://courthouse dogs.com) and other sources. We continue to encourage our child advocacy center to consider therapy dogs.

ND: I think this would be a wonderful tool in working with all types of Victims, but due to budget issue in our county I doubt if this would ever be implemented.

D: We do not like use of the term 'therapy ' dog as it has invited lots of opposition from the defense bar. We do not provide therapy in the D.A.'s Office so that term is misleading. We have that just as many adults as children respond to the dog and find him helpful. Our dog was trained by a local agency that trains dogs for returning veterans with PTSD

The following two quotes, both from No Dog group members, provide examples of the theme *diffusion* and the theme *organizational constraints*. The first quote expresses concerns related to financial resources and the second quote gives voice to how staffing can impact the uptake of an innovation.

ND: The main reason this type of program hasn't been considered in our area is a lack of understanding/knowledge about what the program can do and how it can be implemented. Budget concerns are always present, but really, I am not aware of this type of program ever even being proposed.

ND: We are in the very, very preliminary stages of looking into a dog assisted program with our Victim Services Unit. We are looking for a program where the handler would bring the dog, we don't anticipate having staff handle or keep the dog.

While other innovations may require the adoption of technology (i.e. computers, recording systems), animal- assisted interventions include an animal with needs that

extend beyond the organization's work-day and work-week. The comment reveals an important aspect of the innovation that is not addressed by listing potential barriers. The inclusion of an animal presents challenges that may over reach the organizational capacity for innovation and must be a serious consideration in the innovation-decision process.

This challenge is further exemplified by the theme of *individual constraints* (climate factors such as personal needs, capacities and expertise which influence the inclusion of dogs or the expansion of an existing program). The quotes that follow illustrate a peculiarity of innovations involving animals—the fact that a living being *is* the innovation with needs that go beyond the work-day and work-week structure of organizations. Note that one quote is from a member of the Allied Organizations group and expresses a similar concern in terms of access to qualified dogs.

AO: I work at a non-profit agency as a therapist. I have looked into animals as a therapy source for several patients but the cost and time to train the animals is very demanding. If someone else were able to pay for the training and train and care for the animals to provide as a free service, that would be wonderful. I would like to train and keep an animal as a therapeutic service but most groups require living at a facility for weeks at a time to train the animal which is not feasible in this line of work. I would be willing to consider incurring vet charges and insurance charges for such an animal on my own.

ND: Our agency has applied to 2 agencies. We have not received a dog to date.

ND: No time to develop or find trained team in our rural area.

ND: .....none of our dogs are trained as therapy dogs. Our particular dogs are not appropriate to go through this training (older dogs). None of us has had the resources (time/money) to get a therapy dog. As ED, I would be interested in doing this (owning a therapy dog) and he/she could be a member of my family (have two Pokes at home). I do not know of any organization in our county that certifies dogs.

The following quotes exemplify a sub-theme within *organizational constraints* that has to do with certification or the registration of dogs and handlers. In the first quote, the respondent wrote, "Kaboom, is a 2 and a half year old Welsh Corgi and has been through training but does not have a certificate". The practice of including dogs that are not registered or certified is referred to again in the second quote below.

D: ...our licensed social worker is a therapist and forensic interviewer and serves as our clinical services director. Her dog, Kaboom, is a 2 and a half year old Welsh Corgi, and has been through training but does not have a certificate. We are in the process of getting the certificate with the current owner, our staff member. Until then, we are gradually allowing the dog more access to clients but only with supervised participation.

D: We are using two dogs that have passed a 'Canine Good Citizen' test at a local animal shelter program. Both dogs are rescues with excellent temperaments. We are training them to take a therapy dog test, and intend on registering them once this happens. For now, we are using them on leash to greet victims who are afraid

that are visiting our CAC. We are a DA based program, and would eventually consider using them in forensic interviews and possibly in the courtroom.

These quotes bear evidence of an ongoing challenge within the field of animal-assisted interventions, that of a lack of specialized training and resources for human service professionals. A recent study by Risley-Curtis (2010) revealed while most social workers report having a basic knowledge of the human-animal bond, the vast majority of social workers have had no professional training regarding how to ask about, interpret, or intentionally utilize human-animal relationships in their work with clients – this despite the fact that over two thirds of American households have pets. Furthermore, the structural components of such programs (i.e. animal evaluation processes, and liability insurance) are based on or retrofitted from volunteer processes and training (MacNamara & Butler, 2010).

Another aspect of this significant professional vacuum is found in the two comments that follow. The quotes identify training requirements for the dog ("that animals working in the courthouse setting should be trained by nationally recognized service dog organizations with specific standards and criteria ") and also requirements of handlers ("It is also of great importance that dogs (other animals) working in this setting be handled by professionals in the criminal justice field to ensure confidentiality of sensitive information.. "). However, these comments also provide evidence of another process of retrofitting evaluation procedures from disparate processes to meet the needs of the innovation.

D: I feel strongly that using 'facility' or 'courthouse' dogs (rather than therapy animals and volunteer handlers), is far superior for child victims and their interviews for many reasons. Those who have not looked closely at the differences will not really understand those differences, but I believe the advantages are obvious once one does understand the differences. I appreciate all the good work that Delta Society and American Humane have done, but when it comes to assisting child victims and others within the criminal justice system, professionally trained dogs that are graduates from a program accredited by Assistance Dogs International (ADI) and handled by criminal justice professionals should be used whenever possible, instead of therapy animals and volunteer handlers.

D: Our Courthouse Dog is also tested and registered through Assistance Dogs International, per standards set forth by Canine Companions for Independence. We feel very strongly that animals working in the courthouse setting should be trained by nationally recognized service dog organizations with specific standards and criteria to ensure safety of the dog, handler, and the public. It is also of great importance that dogs/(other animals) working in this setting be handled by professionals in the criminal justice field to ensure confidentiality of sensitive information.

The last quote also exemplifies the misuse and misunderstanding of service dogs as defined by the Americans With Disabilities Act of 1990 (ADA, 1990). According to the ADA a service dog is “trained to do work or perform a task for a person with a

disability" (ADA, Section 35.136). Furthermore, according to the ADA 2010 Revised Requirements, "The work or task a dog has been trained to provide must be directly related to the person's disability." Thus, the law provides for a person with a disability to be accompanied by a service dog in public spaces such as courtrooms, and government buildings. The provisions of the ADA are human rights provisions, not animal access provisions, and yet a number of private organizations that train and supply dogs for people with disabilities also imply that because the dog has received service dog training, the animal is allowed in those public places off limits to pet dogs. Some organizations, furthermore, charge substantial fees for dogs that, as this phrase demonstrates, "She was released from Guiding Eyes for the Blind," are deemed unfit for work as a service dog. This finding is particularly important as it highlights the crucial need for training specific to human service providers regarding the inclusion of animals in these settings.

The following two quotes from respondents who are part of the Dog group exemplify the interaction between the *provider champion* theme and the *individual constraints* theme. Note that both quotes refer to providers' experience of attempting to certify dogs with volunteer therapy dog organizations, and both are champions of including dogs in criminal justice processes.

D: I would love to get my dog certified, have taken a class and we were evaluated unsuccessfully last weekend by the local delta representatives. My rescue dog is deaf and would not do the stay, which frustrates me since she'd never be expected to stay 10 feet from me without me, if she were working. I may or may not try again. I personally felt that the evaluation re. the stay command was not an

accommodation for my dog who does not hear, was rescued from a bad situation, and she'd never be expected to be without me anyway. But, I do believe having access to a dog in my work involvement (child abuse prosecution) is essential.

D: We are currently in the final steps of the Therapy Dogs International certification process for a dog. The dog requires 2 final observations to conclude the testing. The dog will be used in the Sex Crimes/Child Abuse Division to be with children during their initial meeting with the prosecutor and victim advocate. There is one problem we have encountered: With TDI, the liability insurance is only valid if the dog is working with a volunteer. In our situation, the dog will be owned by an employee (Victim Services Director). This is a dilemma that I hope the therapy dog organizations can address for a prosecutor's particular situation. We would not want a volunteer to be sitting in on interviews due to the sensitive nature of the topics that may be discussed.

Finally, the following quote illustrates that some *individual constraints* may come in the form of the needs of coworkers. While the decision to include a new type of therapeutic method or even a new technology primarily impacts those who use the innovation, the inclusion of dogs (or other animals) is more far reaching as the presence of animals can impact everyone in the system.

D: We have to have a dedicated room to do these depositions as the Public Defender's office has noted that several attorneys on staff have or may have allergies.



Findings from the qualitative data greatly enhanced the findings from the quantitative data by providing details regarding staffing concerns, the need for training and liability insurance specific to professionals, as well as challenges of credentialing dogs. The qualitative data confirmed findings from the quantitative analysis that reported budget constraints, fears regarding allergies and a lack of teams in the area act as barriers to implementation.

***Results for research question 4 (How are the needs and expectations of agencies considering incorporating dogs similar to or different from those agencies that are currently incorporating dogs?):*** Data from variables on Important Factors, Work Setting, Has Dog, and Handler Type were used for this analysis.

First, a cross tabulation comparison between the variables Important Factors and Has Dog was conducted. The contingency table (Table 19) provided a picture of the differences in what was reported as important between those working with dogs and those not currently including dogs. Note that the factor picked most often, by those with and without a dog, was that it was important that the animal was tested around children (84.1% for agencies with no dog and 82.4% for agencies with a dog). Some of the other factors were also reported as equally important by agencies using and not using dogs, for example, "animal/handler team that is trained and registered with a national organization" and "team of animals of different breeds and temperaments to be matched to each victim's needs". However, there were also some contrasts in the answers about important factors depending on whether the agency used a dog or not. For example, 63.7% of those respondents not working with dogs reported that the team receive training in working in

the criminal justice system as an important factor, as compared to 43.1% of respondents who currently work with dogs who reported this item as important.

Table 19: <i>Associations Between Important Factors and Agencies with/without Animal</i> (Percents by cases)		
<u>Important Factors to Including Animals</u>	<u>Animal</u>	
	<u>No Animal</u>	<u>Animal</u>
A: Animal/handler team that is trained and registered with a national organization	50.3%	51.0%
B: Animal/handler team that has received additional training on working in the criminal justice system	63.7%	43.1%
C: Animal that has been tested around children	84.1%	82.4%
D: For accessibility, an animal that is allowed to work 'off leash' with victims and agency staff	54.1%	41.2%
E: For safety, an animal that is always 'on leash' with his/her handler	14.0%	31.4%
F: A team of animals of different breeds and temperaments to be matched to each victim's needs	29.3%	25.5%
G: Animal/handler team that can help at no cost	75.8%	64.7%
H: Animal/handler team that comes with liability insurance	65.0%	49.0%
I: More than one animal/handler team to work with your office	12.1%	29.4%
Total (n=208)	Count	157      51

Agencies with dogs placed more importance on different factors named in the survey. For example, the percentage of those currently including dogs who reported that the animal should always be on a leash (31.4%) was approximately double that of those who did not currently include dogs (14.0%). In addition, a greater percentage of those who reported including a dog reported that the availability of more than one team was important (29.4%) compared to the percentage of those not including dogs who reported additional teams as an important factor (12.1%).

A cross tabulation comparison of the differences between Work Setting and Important Factors was conducted to examine if individuals working in different settings

reported different factors as important to including a dog. The contingency table (Table 20) revealed that respondents appear to be in some level of agreement regarding what is important to including dogs in the list provided. Given that few individuals from the courts (5) and child protection agencies (7) are represented in this sample, the percent of respondents in each work setting choosing factors as important or not are fairly comparable. However, there is one exception to this observation; the percentage of

		<u>WORK SETTING</u>				
		1. District Attorney Office	2. Children's Advocacy Center	3. Law Enforcement Agency	5. Court	6. Child Protection Agency
<u>What is Important to Including Animals</u>						
A: Animal/handler team that is trained and registered with a national organization.		51.5%	66.7%	45.5%	60.0%	57.1%
B: Animal/handler team that has received additional training on working in the criminal justice system		64.6%	52.4%	77.3%	80.0%	42.9%
C: Animal that has been tested around children		83.8%	95.2%	81.8%	80.0%	85.7%
D: For accessibility, an animal that is allowed to work 'off leash' with victims and agency staff		44.4%	71.4%	40.9%	60.0%	71.4%
E: For safety, an animal that is always 'on leash' with his/her handler		13.1%	26.2%	13.6%	0.0%	14.3%
F: A team of animals of different breeds and temperaments to be matched to each victim's needs		26.3%	23.8%	13.6%	40.0%	57.1%
G: Animal/handler team that can help at no cost		73.7%	78.6%	68.2%	100.0%	51.7%
H: Animal/handler team that comes with liability insurance		65.7%	61.9%	40.9%	40.0%	85.7%
I: More than one animal/handler team to work with your office		15.2%	23.8%	0.0%	20.0%	28.6%
Total (n=175)	Count	99	42	22	5	7

individuals working in child advocacy centers and child protection agencies reporting that it is important that the animal work 'off leash' (71.4% for both settings) is considerably higher than the percentage of respondents working in the district attorney's office (44.4%) or law enforcement agencies (40.9).

As a result, further exploration of the association between the setting and the items reported as important was accomplished by conducting a cross tabulation comparison between Service types and Barriers. The resulting contingency table (Table 21) provided a layered picture of the differences. This organization of the data more

Table 21: <i>Association Between Important Factors to Including Animals and Service Type</i> (Percents by cases)		
<u>Important Factors to Including Animals</u>	SERVICES	
	<u>Legal</u>	<u>Victim</u>
A: Animal/handler team that is trained and registered with a national organization	51.2%	64.6%
B: Animal/handler team that has received additional training on working in the criminal justice system	67.5%	52.1%
C: Animal that has been tested around children	83.7%	93.8%
D: For accessibility, an animal that is allowed to work 'off leash' with victims and agency staff	44.7%	70.8%
E: For safety, an animal that is always 'on leash' with his/her handler	12.2%	22.9%
F: A team of animals of different breeds and temperaments to be matched to each victim's needs	24.4%	29.2%
G: Animal/handler team that can help at no cost	73.2%	75.0%
H: Animal/handler team that comes with liability insurance	59.3%	64.6%
I: More than one animal/handler team to work with your office	13.0%	25.0%
Total (n=171)	Responses 123	48

reveals that a greater percentage of respondents working in victim service setting report that it is important that the animal work 'off leash' (70.8%) compared to only 44.7% of respondents working in legal service settings. This is an important finding as it may have

very concrete implications for training and procedures for animals and handlers in different settings.

The association between the respondents' work setting and their perceptions of important factors was further examined through a cross tabulation comparison divided into agencies with or without dogs. In terms of the importance of the animal being 'on leash' or 'off leash', the resultant contingency table (Table 22) revealed that, for 78.1% of respondents who worked in victim services and were not including a dog, working 'off leash' was important as compared to 47.9% of respondents who worked in legal settings and were not including dogs. However, this difference is reduced among respondents who currently include dogs. For those who work in victim service settings and currently include dogs 46.2% of respondents reported working 'off leash' as important compared to 29.2% of respondents working in legal service settings who currently include dogs.

The contingency table revealed that respondents selected other factors to a greater extent than the factor of working 'on leash' or 'off leash' as important to the practice of including dogs in criminal justice processes. The factor selected by the greatest percentage of respondents in both legal services and victim services and those working with dogs and those not working with dogs was that the animal was tested around children. Specifically, 83.3% of respondents who work in legal services and do not include a dog, 90.6% of respondents who work in victim services and do not include a dog, 83.3% of respondents who work in legal service and include a dog, and 100% of respondents who work in victim services and include a dog report that 'testing the dog around children' is an important factor.

Table 22:

*Association Between Important Factors to Including Animals by Animal Inclusion and Service Type (Percents by cases)*

<u>Important Factors to Including Animals by Current Inclusion of Animals</u>		<u>SERVICES</u>	
		<u>Legal</u>	<u>Victim</u>
No Animal	A: Animal/handler team that is trained and registered with a national organization	51.0%	62.5%
	B: Animal/handler team that has received additional training on working in the criminal justice system	70.8%	56.3%
	C: Animal that has been tested around children	83.3%	90.6%
	D: For accessibility, an animal that is allowed to work 'off leash' with victims and agency staff	47.9%	78.1%
	E: For safety, an animal that is always 'on leash' with his/her handler	8.3%	18.8%
	F: A team of animals of different breeds and temperaments to be matched to each victim's needs	25.0%	34.4%
	G: Animal/handler team that can help at no cost	77.1%	78.1%
	H: Animal/handler team that comes with liability insurance	59.4%	81.3%
	I: More than one animal/handler team to work with your office	10.4%	15.6%
	Total (n=128	Responses	96
Has Animal	A: Animal/handler team that is trained and registered with a national organization	50.0%	69.2%
	B: Animal/handler team that has received additional training on working in the criminal justice system	54.2%	38.5%
	C: Animal that has been tested around children	83.3%	100.0%
	D: For accessibility, an animal that is allowed to work 'off leash' with victims and agency staff	29.2%	46.2%
	E: For safety, an animal that is always 'on leash' with his/her handler	29.2%	38.5%
	F: A team of animals of different breeds and temperaments to be matched to each victim's needs	20.8%	23.1%
	G: Animal/handler team that can help at no cost	54.2%	76.9%
	H: Animal/handler team that comes with liability insurance	54.2%	38.5%
	I: More than one animal/handler team to work with your office	25.0%	46.2%
	Total (n=37	Responses	24

Similarly, legal service agencies as well as victim service agencies working with and without dogs report that teams that can help at no cost as an important factor although agencies that do not currently include dogs report this factor to a greater

percentage. Legal service agencies that do not include dogs and victim service agencies that do not include dogs equally reported no cost teams as important (77.1% and 78.1%, respectively). In settings that included dogs 54.2% of legal service setting and 76.9% of victim service settings reported no cost teams as important.

Furthermore, 70.8% of those working in a legal service setting not including dogs reported that additional training in the criminal justice system was important as compared to 56.3% of respondents working in a victim services settings that do not include dogs. This trend was similarly reported by respondents who currently included a dog. For these respondents with dogs, additional training was reported as important to 54.2% of those working in legal settings, compared to only 38.5% of those working in victim services settings.

In order to explore the variation in the number of items endorsed as important by respondents from different work settings, ANOVA was used to calculate descriptive statistics and test the significance of the differences. Although respondents who worked in child protective agencies reported the most items as important (4.57, SD 1.72) and those working in the courts reported the fewest items as important (4.00, SD 1.00), there were no significant differences in the number of barriers reported by work setting ( $F(4, 1154) = .122, p = .974$ ). Similarly, a  $t$  test of independent means for type of service by number of items reported as important also found no significant difference ( $t(157) = .080, p = .117$ ). %).

In sum, the quantitative analysis revealed that there appears to be agreement that it is important that animals be tested around children. Conversely, while there was a difference between the items reported as important factors between respondents who were currently working with dogs and those who were not in terms of how the animals were handled (i.e. 'on leash' or 'off leash'), this difference was not strongly associated with any particular work setting.

Although it appeared that it was more important that the animal should always be 'on leash' for those currently including dogs than for those who did not currently include dogs, the difference was reduced when examined by work setting. It appears that legal service agencies with and without dogs report additional training in the criminal justice system as important but this factor is less important for victim service agencies with or without a dog. However, these findings on important factors also support the qualitative findings in the previous section showing that the lack of training is a significant barrier to including dogs.

Qualitative data were analyzed to either further explore these findings. In particular the following comments were contained in the *diffusion* theme and expand upon the quantitative findings regarding the importance of handler training.

ND: We work for court administration and are trying to encourage dependency courts throughout Florida to begin using pets to help children as they navigate through the dependency process. Any information you have that we could pass on to judges would be helpful.



ND: We haven't thought of using an animal in our office, but would be interested in learning more about other Child Protective Service Agencies who are and how they're doing it.

ND: I don't know [that] I have thought about using animals for victim assistance. I have only known of using them for enforcement/detection issues. It would be interesting to learn more about those kinds of options.

The quotes point to a gap in the needs assessment. Although the survey listed seven items as important to including dogs none of the items related to the need for staff training. The survey listed the dog handler as the only individual needing training. However, the comments indicate that staff perceive training and information as an organizational need (as indicated by the use of 'we' in a number of quotes) rather than merely an individual handler need.

The following two quotes, again from No Dog group members, provide examples of the theme *diffusion* and the theme *individual constraints*. The co-location of the themes indicates the inter-relatedness of the process of innovation adoption.

D: No one has actually proposed it. I am aware of the idea but it is not something on which I personally would take the initiative.

D: I don't know what I would look for. I have no experience in this area of working with animals. I have not heard of any of our Officers who are interested in working with animals. Also, I don't believe the Tribal Council will sit well with this.

The wording of the quotes gives individual voice to respondents through their use of the word "I". Also, the use of "I" reflects the personal nature rather than the organizational nature of the constraint. Thus the phrases, "I have no experience..." and "... it is not something on which I personally would take the initiative..." lend detail and depth to the information gained in analysis of the quantitative data regarding the frequency with which important items were nominated.

In addition, it is important to note that the respondent in the second quote identifies the notion of cultural influence into the analysis. This is an important issue that has been omitted from the survey and, as indicated in the quote, can contribute to the organization's decision not to adopt an innovation. The child welfare literature has long recognized the importance of accounting for cultural diversity in terms of service delivery (Suh, 2007). While less expansive the literature related to human-animal relationships contains numerous studies of the different attitudes and perception of animals by various cultural groups. Cultural attitudes and perceptions range from the inclusion of animals in family systems most often demonstrated by members of Western cultures to cultural and religious prohibitions regarding certain species found in some Middle Eastern cultures (Herzog, 2010).

Although the following comments are related to the themes *organizational constraints*, they are central to the consideration of how agencies that include dogs may differ from agencies that do not include dogs in terms of organizational needs and expectations. Note that the quotes are similar between members of the Dog and No Dog

groups, however, the quotes from the No Dog group ask for specific information regarding benefits and risk.

D: Our Therapist is the owner of the dog. There are plans to have her certified, budget constraints have effected this process.

D: I would love to be able to use a service animal in a forensic interview, but need research specified on the benefits outweighing the risks in a forensic interview.

ND: Turnover of employees and differences of opinion in the management of the animal caused our office to end the program.

ND: In addition to fiscal considerations I am not persuaded that the value of an animal used in this fashion outweighs concerns about the dignity of the courtroom and the potentially unfavorable view jurors may have as to the credibility or reliability of a witness or victim who is unable to effectively testify without such assistance.

ND: I expect the use of the dog to be an appellate issue. It was a great success at trial, but management won't invest in trying to make a program work.

ND: Concerns regarding cleanliness - hair, saliva, urine, feces - and clients who may be allergic or have fear of animals.

ND: You cannot expect state or local governments to pay for these animal services at this time. If you intend to provide these services, I strongly encourage you to find a way to do so through private funding and non-governmental

expenditures. Tax dollars in my state will not go to fund this type of service. It's really that simple.

ND: Not enough staff to administer an additional program, concerns about liability and allergies, facility is very small.

ND: At our meeting we have discussed having therapy animals present to assist with crime victims and children but have not seemed to agree on the correct avenue to provide this service. The main concern of management has been that a therapy animal must be fully trained for the types of guests we have in our office.

The organizational implementation literature has identified organizational components or processes that contribute to the successes and failures of innovations (Crea et al. 2008). Specifically, studies have consistently found that successful implementation can be hindered by a number of fiscal and administrative limitations including a lack of agency administrative infrastructure (Glission, 2007). This factor is exemplified by the quote, "Turnover of employees and differences of opinion in the management of the animal caused our office to end the program." Phrases such as, "... have not seemed to agree on the correct avenue...", "...management won't invest in trying to make a program work..," and "Not enough staff to administer an additional program.." are further indicative of influence of organizational context on innovations.

It is interesting to note that almost 30% of the quotes related to the *organizational constraints* theme were provided by respondents in the Dog group. This is a sharp contrast to the findings of the quantitative analysis which revealed that respondents who

reported including a dog (Dog group) did not answer the survey question regarding barriers to including dogs. The two quotes, above, from respondents in the Dog group indicate that the program is hindered by organizational constraints even though the program has been adopted. For example, the quote, "There are plans to have her certified budget constraints have effected this process" raise questions as to the sustainability of the program. The qualitative analysis revealed details of responses to survey questions regarding animal credentialing as important to including dogs.

ND: I am also the PI on a grant that funds our local Child Advocacy Center (CAC). We have been in discussions about using animals during our Forensic Interviews, and then again in court. Several of our local Commonwealth Attorneys have indicated an interest.

ND: We currently do not have a dog, but we are expecting to have a courthouse dog effective August 17, 2012, that will be used according to the answers given above.

D: For me and my agency it was also important to build something that would maintain sustainability over time regardless of staff changes or budget changes.

## **Summary**

In summary, the purpose of this study was to explore the critical elements or core factors that bear on professionals from multiple perspectives to better understand the factors that contribute to or impede stakeholders' implementation of dogs as judiciary aides. Specifically, the objectives of the current needs assessment were examined through

the following questions: (1) What are the perceived benefits of implementing programs with dogs as judiciary aids throughout criminal justice? (2) What specific roles do professionals identify for dogs within criminal justice, (3) What are potential barriers to the implementation of dogs as judiciary aids programs, and (4) How are the needs and expectations of agencies considering incorporating dogs similar to or different from those agencies that are currently incorporating dogs.

In this secondary analysis of Task Force survey data research question 1 (What are the perceived benefits of implementing programs with dogs as judiciary aids throughout criminal justice?) was answered indirectly through analysis of where dogs worked and whether the handler was a staff member or volunteer. It was reasoned that a relationship between the two variables could provide insight into program expectations. Analysis revealed that roles for dogs tended to match activities in that particular setting, thus respondents from district attorney's offices reported activities found within that service sphere (i.e. testimony, court preparation).

The qualitative analysis provided more insight into the first research question. Findings revealed that a preponderance of statements referred to generalized benefits rather than more specific, measurable client outcomes. Although some respondents reported that they perceived that the presence of animals could reduce children's anxiety and others implied that animals produced a calming effect, only a few respondents indicated a clear picture of exactly what or who would benefit from animal contact. This finding is consistent with the fact that a majority of respondents to the Task Force survey

reported working in legal services rather than victim services where client outcomes are more usually considered and measured.

Conversely, several respondents provided eye witness accounts of the influence of a dog's presence on perceived staff stress levels. Comments from four different respondents reported that staff both behaved and verbally expressed less stress when dogs were included in the setting. Three comments reported observations of reduced stress in children when a dog was present in the setting. From the brief comments it was not clear if these observations were singular, serendipitous events or the result of planned interventions. Moreover, some of the observations that children appeared less stressed and anxious were reported by staff with mental health training and some observations were reported by legal staff. Thus, because the observations were made by individuals both trained and not in mental health and no clinical measurements were made to confirm stress levels the accuracy of the observations should be considered with caution.

Results for research question 2 (What specific roles do professionals identify for dogs within criminal justice?) illuminated the relationship between the work setting, type of handler (staff or volunteer) and role for dogs. Analysis revealed that the role of "greeter" is the most common role for including dogs as judiciary aids across settings and among both types of handlers. The roles reported for dogs appear to be associated with the setting in which the dog is included and the type of handler working with the dog (i.e. staff or volunteer). This was similar to the reporting pattern discovered for research question 1; respondents appeared to identify roles for dogs within the scope of their profession (i.e. legal staff reported roles associated with legal processes).

In addition, staff handlers reported a wider variety of roles for dogs in both legal settings and in victim settings but fewer roles for dogs were reported for volunteer handlers. The fact that more roles for dogs were reported for agency staff than were reported for volunteers is somewhat surprising as staff tend to be more circumspect with respect to novel approaches.

Qualitative findings shed light on the intricacies involved in including dogs as judiciary aids in identifying specific roles for dogs and in developing communication between colleagues and infrastructure regulations. Respondents cited situations in which dogs were included in some settings within an agency but not in other settings. In other statements, respondents noted that the agency was unable to reach agreement regarding the inclusion of dogs. Respondents did not provide information regarding the details of disagreement, however.

Results for research question 3 (What are potential barriers to the implementation of dogs as judiciary aids programs?) were limited to reports of respondents currently not including a dog in child maltreatment investigation and prosecution processes, but were nonetheless informative. The most frequently reported barriers to including dogs, across all work settings were budget constraints followed by a lack of available teams. However, bivariate analysis revealed differences between barriers reported by respondents working in legal services and respondents working in victim services. Those working in legal services primarily reported a lack of teams as a barrier while respondents in victims services primarily reported issues related to direct client contact such as allergies and concerns about safety as barriers. However, the variance in reporting was not significant.



An important finding in this study is the separation of barriers into organizational and individual constraints. Qualitative findings provided an expanded understanding of reported factors contributing to resistance to dogs as judiciary aids programs or the expansion of such programs, and exposed the dynamic interplay between individuals and organizational structures. The themes of organizational constraints and individual constraints encompassed a large portion of the total number of comments to the survey. These comments provided rich detail to singular response choices by explaining the location and depth of barriers. For example, while respondents may have reported "opposition from management" as a barrier from the item choices, comments that identified restrictive building policies as a barrier and comments that described negative attitudes from managerial staff provided important clarity to the composition of the more general "opposition from management" choice.

A great part of the statements related to confusion between the various titles assigned to dogs and systems related to determining whether the animal was appropriate for the criminal justice setting. In addition, respondents identified situations in which obtaining such credentials was a barrier to starting or expanding programs. In addition, respondents illuminated the problem of trying to fit policies and procedures to working with a living animals that must be cared for beyond day to day operating schedules of the agency.

The last question in the study (How are the needs and expectations of agencies considering incorporating dogs similar to or different from those agencies that are currently incorporating dogs) examined the reported barriers and important factors for

those who reported including dogs and those who did not include dogs. A comparison of these variables revealed that, as declared by Fixsen, Blasé and Wallace (2011), "An intervention is one thing. Implementation is another" (p. 134). Although the differences in reports of barriers and important factors between those including dogs and those not including dogs was not statistically significant, the differences did highlight the challenges of implementing an intervention in contrast to delivering the intervention to an individual.

While bivariate analysis of important factors revealed that the majority of respondents in both groups equally reported that "animal has been tested around children" as an important factor, respondents not including dogs also reported teams available at no cost, teams with liability insurance, and training in the criminal justice system as important. Further, these items were reported more frequently than the other items.

Respondents including dogs reported important factors at a more evenly distributed frequency. Respondents working with dogs reported having teams available at no cost, and teams registered with a national organization as the least important factors than all other items. It should be noted that this group, having experience working with dogs, reported having dogs work 'on leash' for safety at nearly twice the rate of respondents with no experience including dogs. Thus, it appears that, for this sample, those working with dogs identify a broad range of items as important while those respondents without experience working with dogs in the criminal justice setting reported fewer items as important.

The important factors of having animals tested around children, and teams available at no cost were also the most frequently reported factors when the responses were analyzed by work setting rather than the presence of a dog. In further contrast, the differences between handler factors ('on leash' vs. 'off leash') diminished and a more broad distribution of important factors was evinced. Analysis of work settings as a dichotomized variable revealed a slight difference in the results; respondents in legal settings also reported training in the criminal justice system as important while respondents in victim service settings also reported working "off leash" as important.

The addition of the experience of including dogs (Has dog/No Dog) to the analysis revealed further information regarding differences between the groups in terms of what was important. It appears that respondents in this sample who include dogs in legal service settings reported most of the items in the survey as equally important with testing animals around children as the most important factor. Those working in legal services without dogs appeared to single out specific items as most important including testing the animal around children, team available at no cost, and training in the criminal justice system as important (in that order).

In contrast, the majority of respondents, in this sample, who worked in victim services that included dogs reported testing the animal around children, teams that can help at no cost and teams registered with a national organization as important (in that order). Respondents working in victim services without a dog reported nearly twice as many items as important including dogs working 'off leash' and teams with liability insurance as important.

Qualitative finding for this question further identified the importance of training in the criminal justice system and expanded this item by explaining that training was important across agency staff, not just for animal handlers. The qualitative findings also revealed an important factor omitted from the survey choice list, that of cultural differences. As culture has been shown to influence attitudes and perception of animals this issue can be considered both a barrier and an important factor in the implementation of dogs as judiciary aids.

Finally, qualitative findings revealed that organizational infrastructure and program structure are important factors in the implementation of dogs as judiciary aids. Comments regarding what was important expanded on broad items included in the choice list as reported for research question 3. For example, comments such as "it was also important to build something that would maintain sustainability over time regardless of staff changes or budget changes" provided more depth and detail to what is important beyond specific issues related to animal handling that made up the survey list of important factors.

## **Chapter Five: Discussion**

Personnel making up the multidisciplinary system response to child maltreatment evince a substantial commitment to the wellbeing of children which often fosters increasing experimentation and common action to develop better methods. One practice increasingly put forwarded by child advocates is the inclusion of dogs in criminal justice processes associated with child maltreatment. The purpose of this study was to explore the critical features or core elements that bear on professionals from multiple perspectives to better understand the factors that contribute to or impede stakeholders' implementation of dogs as judiciary aides.

The organizational context and organizational climate includes the norms, values, expectations, perceptions, and attitudes of the members of the organization, all of which affect how services are delivered. Organizational culture and context determines how things are done in the organization; what the priorities are in the work environment; what and who gets recognized, rewarded, or punished; and what the psychological impact of the work environment is on the individual service providers who work there (Fixsen et al., 2011).

The researcher knows of no other studies in the field of animal-assisted interventions which has explicated the different forces that may influence program success. It is difficult to evaluate interventions without recognizing that poor outcomes may reflect flawed implementation processes rather than flaws in the intervention as it is

designed. Scholars observe that “implementation outcomes” are distinct from service system and clinical treatment outcomes and that innovative treatment or programs will not be effective if a treatment or program is not implemented well (Crea et al. 2008). Additionally, the complexity of criminal justice systems, combined with organizational influences that are difficult to quantify, pose significant challenges to effective program implementation (Glisson, 2007).

This discussion will examine the integration of dogs into existing criminal justice processes and argue that any effort to implement novel treatments should be rooted in formal practices that evaluate the needs of providers and consumers, as well as systemic strengths and constraints, in order to ensure the delivery of effective and sustainable programming in complex, real world settings (Fixsen et al., 2011).

### **Implications for practice:**

#### **Impacts on staff:**

One of the most interesting study findings were observations of the impact on staff stress levels. This finding, alone, is significant in terms of its implications for child maltreatment settings as improvements in staff morale resulting from including dogs could have important impacts on the quality and continuity of victim services. Indeed, in a study of the barriers to improving child welfare services, Collins-Camargo (2007) found negative effects of secondary trauma and/or job burnout on child welfare staff's implementation of new practices. The author notes that a majority of staff communicated that they were in “survival mode” and had little energy to implement innovative casework practices. However, Glisson and Schoenwald (2006) found in a national sample

of mental health clinics that individual clinicians' morale impacted client services.

Although speculative, the far-reaching implications of these benefits would alone seem to justify further investigation of the value of animal-assisted interventions in this setting.

While anecdotal reports describe benefits from therapy dog encounters for staff (Serpell, 2006), non-client effects have been studied in a systematic way in only a few cases. Barker, Knisely, McCain and Best (2005) measured stress and immune function in 20 healthcare professionals (19 women and 1 man) following interaction with a therapy dog. The authors found significant reductions in stress hormones (i.e. serum and salivary cortisol) following interaction with a therapy dog. The authors suggest stress reduction in healthcare professionals may occur after as little as 5 min. of interaction with a therapy dog.

From an organizational perspective, Barker, Knisely, Barker, Cobb, and Schubert (2012) compared differences between employees who bring their dogs to work, employees who do not bring their dogs to work, and employees without pets on physiological and perceived stress, perceptions of job satisfaction, organizational affective commitment, and perceived organizational support. Findings revealed that although no significant differences were found between the groups on physiological stress or perceived organizational support, those employees who brought their dogs to work scored significantly higher on multiple job satisfaction subscales than those who did not bring their dog to work and employees without pets. The authors also reported that although perceived stress was similar at baseline; over the course of the day, stress declined for the group who brought their dogs to work and increased for those who did

not bring their dog to work and employees without pets. Furthermore, the authors noted that, by the end of the day, employees with pets who did not bring their dogs to work had significantly higher stress than the group with dogs.

In a recent study of healthcare providers, Marcus, Bernstein, Constantin, Kunkel, Breuer, and Hanlon (2012) evaluated the potential stress-relieving benefits for staff members from therapy dog visits in an outpatient pain management facility. They found reductions in scales for fatigue, stress, aggravation, anxiety, sadness and irritability and increases in scales for calmness, and relaxation following contact with the therapy dog. The authors suggest that the ability of staff to spend a few minutes petting a therapy dog between patient duties may be more feasible in a busy office than scheduling longer periods for quiet rest or other stress reduction practices. This finding certainly provides an added incentive to include dogs in the high stress setting of child welfare and could be an important factor affecting the organizational climate of these organizations (Crea et al. 2011).

Furthermore, a collateral benefit to including dogs or other animals in this setting could be the impact on families and in particular on the non-offending caregiver. As noted by Jones et al. (2007), despite a number of improvements to the process of investigating allegations of child maltreatment, a significant number of caregivers are distressed by the process. The possibility of improving caregiver interaction with the investigation team could be important not only to the family but also to the prosecutorial process.



### **Clear client goals and intervention model:**

Conversely, findings also revealed that a majority of respondents could only identify generalized benefits of including dogs as judiciary aids. Although some respondents reported that they perceived animals could reduce anxiety and others implied that animals produced a calming effect, only a few of the respondents indicated a clear picture of exactly what or who would benefit from animal contact. Still other had questions about specific benefits and specific protocols for program implementation.

The lack of clear client goals is a common finding reflected in animal-assisted intervention research. Without specific and measurable goals, dogs as judiciary aids are more likely to be seen as an occasional departure from standard routine, such as placing flowers in the waiting area, rather than acknowledged as accepted practice. More skeptical audiences, such as administrators of budgets who might fund animal-assisted interventions, require a higher standard to begin to endorse the use of nontraditional practices.

Findings regarding where dogs are included in the criminal justice setting revealed that respondents reported including dogs in a variety of roles. More specifically, professionals identified roles for dogs that matched their particular scope of influence, thus professionals involved in legal aspects identified activities found within that professional sphere (i.e. testimony, court preparation). While one would expect this type of association, the finding raises concerns for an intervention that is expected to function within a multidisciplinary system. This finding is similar to findings in innovation literature suggesting that although the complex system of child welfare requires

interprofessional coordination and cooperation, explicit mechanisms for the development of integrated services is frequently lacking.

Procter et al. (2011) observed that an intervention must be well defined and carefully evaluated with regard to its effects on its intended consumers (children, families, adults). Likewise, implementation of an intervention must be well defined and carefully evaluated with regard to its effects on its intended consumers (practitioners, managers, organizations, systems). Similar to the reported lack of clear client goals, the manner in which animal-assisted interventions are delivered also varies widely (MacNamara & Butler, 2010). In some cases, animal interactions are largely undirected. At the other end of the spectrum, a number of programs exist in which caring for and learning about animals forms the foundation on which the intervention is based. In between, there exist a variety of programs that actively integrate animals into interactions between people using a range of different techniques.

The finding in this study that respondents reported a wide variety of roles could stem from lack of a clear intervention model both in terms of the intervention and in terms of implementation of the intervention. Within the field of animal-assisted interventions there is limited research regarding what actually comprises animal-assisted interventions. In a meta-analysis of animal-assisted interventions, Nimer and Lundahl (2007) reported that there was considerable variation in the interventions studied and great variation in intervention deployment. The authors noted that such variance means that a universal understanding of what an animal-assisted intervention is and how it is used does not exist. Without a model for animal-assisted interventions in criminal justice

settings that clearly define program outcomes, animal's roles and behavioral expectations it will be difficult to determine intervention effectiveness and difficult to implement the appropriate organizational structures and quality control measures.

**Staff training:**

The study found evidence similar to the ongoing challenge within the wider field of animal-assisted interventions, that of a lack of specialized training and resources for human service professionals. Although respondents who included dogs and respondents without dogs reported additional training in the criminal justice process as an important factor, qualitative findings revealed different perspectives regarding to whom training could be important.

Respondents who did not include dogs spontaneously commented on the need for staff training separate from the response choice for handler training. Findings from this study suggest a need for staff training that moves beyond handler training and has multidisciplinary components. This finding exemplifies results of a recent study by Risley-Curtis (2010) which found that while most social workers report a basic knowledge of the human-animal bond, the vast majority of social workers have had no professional training regarding how to ask about, interpret, or intentionally utilize human-animal relationships in their work with clients – this despite the fact that over two thirds of American households have pets.

Results reported in innovation research recommend that innovation training consist of the targeted distribution of information and intervention materials to a specific management or clinical practice audience with the intent to spread knowledge about the

associated intervention (Crea et al. 2011). Fixsen, Blase, Naoom, and Wallace (2009) argue that attendance at trainings is unlikely to produce practice change unless implementation plans include extensive ongoing coaching and consultation. The authors express the necessity of adopting training programs that are consistent with adult learning principles to increase the likelihood of sustained system change.

Furthermore, the findings in this study that respondents advocate the inclusion of dogs across a wide variety of settings, despite a lack of evidence of the benefits of such programs raises concerns that an understanding of the perspective of those not enamored with animal programs are not being heard. As the lone dissenting comment in this study remarked, "I am not persuaded that the value of an animal used in this fashion outweighs concerns about the dignity of the courtroom and the potentially unfavorable view jurors may have as to the credibility or reliability of a witness or victim who is unable to effectively testify without such assistance." Thus, it will be important to actively engage those who are more skeptical of the benefits of animal-assisted interventions to develop balanced and fair program practices.

An additional finding of this study that has practice implications is the preponderance of reports regarding the importance of testing animals around children. This finding was consistent across handler types and to a lesser extent across work settings. Further, respondents working in victims services reported that registration with a national organization was important. However, it is important to note, first, that most dog bites suffered by children are inflicted by the family pet or a dog familiar with the child (Schalomon, Ainoedhofer, Singer, Petnehazy, Mayr, Kiss & Höllwarth, 2006). Moreover,

there are no reported levels of reliability or validity for screening processes for canine temperament or for animal selection processes for national and regional therapy dog programs (MacNamara & Butler, 2010; Serpell, 2006). In addition, the screening and selection procedures used by therapy dog organizations were developed over 15 years ago to screen animal/handler teams for brief, weekly nursing home and hospital visits. Utilization of these protocols as screening tools for animals that may be included in the highly charged setting of child maltreatment investigation and prosecution on a daily basis goes beyond the original objectives of the screening tools.

Thus, there is no evidence that these processes reduce risk for the public or staff. The findings of this study, nonetheless, provide evidence of the practice of retrofitting animal evaluation procedures from disparate processes in lieu of developing appropriate practices for the courtroom or forensic setting. The application of inappropriate measures and the use of interventions designed for client populations essentially unrelated to those being treated would be seen as unprofessional and potentially unethical by most mental health standards (Gilgun, 2005). And yet, some advocates for the inclusion of dogs in the investigation and prosecution of child maltreatment have implied that processes based on anecdotes or on findings in the literature that vary greatly in subject samples, interventions, outcomes, procedures, and instruments provides reasonable assurance of program safety (O'Neill-Stephens, 2009).

Taken together these findings suggest that changing professionals' traditional practice paradigms towards practice paradigms that are more interprofessional in nature will be slow, limited, and continuously challenging. Clear client goals and program

outcomes should be developed prior to including animals. In addition, consistent with a prominent principle in community psychology, careful attention should be given to the needs and perspectives of those stakeholders who may be skeptical or opposed to including animals in criminal justice processes as shared decision-making has been found to enhance implementation outcomes (Stith, Pruitt, Dees, Fronce, Green, Som, et al., 2006).

Furthermore, if dogs as judiciary aids are to be successfully integrated into practice and decision-making, it is recommended that agencies budget for “animal-assisted intervention experts” to provide specific consultation to operationalize goal-specific human/animal interactions. Animal-assisted intervention experts would need to be human service professionals who have specialized training in the incorporation of animals in human service settings rather than advocates who often modify dog training practices or volunteer handler programs to fit a variety of settings (MacNamara & Butler, 2010). Animal-assisted intervention experts should also be available for case conferences and staff meetings to draw attention to how animals can be integrated into service planning and implementation. These recommendations are based on those suggested by Fixsen, Naoom, Blasé, Friedman, & Wallace (2005) for successful implementation of trauma-informed practices within child welfare systems (legal, mental health, child welfare, and education).

## **Implications for policy:**

### **Organizational inclusion:**

If current trends are any indication, animal-assisted intervention programs are likely to continue to proliferate in the absence of convincing efficacy data. The field appears to be driven forward by the ardent faith of its numerous practitioners and supporters who believe that these interventions work, and are happy to grasp at any evidence, however weak, to support their own convictions. Some comments from this study suggest that practitioners who are interested in including dogs will use such reports to reinforce their beliefs about the value of this practice.

This leads to an important finding in terms of how the concerns and perspectives of agencies considering incorporating dogs varied from those agencies that are currently incorporating dogs. The nearly 100% agreement with the question, "Do you believe it would be valuable to have the assistance of an animal to help crime victims," is indicative of strong support for the innovation as well as identifying the role of a "innovation champion," a central component of successful innovation implementation (Rogers, 2003).

Research has demonstrated that an innovation champion is often important in the innovation implementation process in organizations (Rogers, 2003). Although some innovation champions are individuals at the top organizational levels, research findings indicate that champions are often middle management or line workers. For example, in a study of how evidence-based trauma treatment programs were adopted by child welfare organizations, Aarons and Palinkas (2007) found that the most effective champions were case managers and assistant directors. In the current study, it is important to note that the

champions were also located across multiple agencies and included allied organizations as well as animal organizations.

The issue of champions is a central detail in terms of understanding "who" responded to the survey, but, more importantly, may be a key consideration in terms of animal-assisted intervention implementation. A disturbing trend in the field of animal-assisted intervention programs is that many programs are short lived (Serpell, 2006). It is proposed that this phenomenon is related to the observation that the vast majority of programs are dependent on a champion who is a volunteer in the setting. Although passionate in their support, volunteers may not have the capacity or organizational power to overcome structural limitations such as service focus and delivery. While champions are important to successful implementation, the lack of strong internal support may prevent eventual innovation adoption, especially for complex settings such as the criminal justice system process for child maltreatment. Thus, agency staff are key figures in effective program implementation, especially in the development and support of sound policies (Green, 2008).

**Sustainable practice:**

An additional concern is the fact that organizations, communities, and even the federal government are creating policies based on the perception that there are so many good animal-assisted interventions programs with varying policies and procedures that there is no reason to develop specific program goals and outcome expectations (MacNamara & Butler, 2010). However, an important finding of this study revealed an expanded understanding of factors contributing to resistance to dogs as judiciary aids



programs or the expansion of such programs by exposing the dynamic interplay between individuals and organizational structures. For example, survey comments describing where dogs worked were sometimes accompanied by statements explaining that while dogs were included in some interactions, additional roles faced barriers from other staff or management.

Furthermore, results revealed that important factors included infrastructure components (i.e. animal credentialing processes, and liability insurance) based on or retrofitted from volunteer processes and training which actually created barriers to including dogs or expanding programs (MacNamara & Butler, 2010). For example, the current practice of including a separate individual to manage the animal is based on pioneering programs in which volunteers brought specially selected pets to visit individuals in long-term care settings (Hines & Fredrickson, 1998). While it may be a useful model for programs in which a number of participants are engaged with a number of animals, in terms of safety and coverage, it is a questionable practice in applications in which confidentiality, privacy and intimacy are needed. To require a separate, non-staff handler in such applications may be more a function of poor evaluation processes or lack of provider training. These results are similar to findings in innovation literature suggesting that although the complex system of child welfare requires interprofessional coordination and cooperation, explicit mechanisms for the development of integrated services is frequently lacking (Collins-Camargo, Shackelford, Kelly, & Martin-Galijatovic, 2011).

The finding that a majority of respondents reported budget constraints as a barrier and also reported that it was important that an animal/handler team be available at no cost raises concerns as to the sustainability and benefits of programs that rely exclusively on volunteers. This finding also illustrates a peculiarity of innovations involving animals—the fact that a living being is the innovation with needs that go beyond the work-day and work-week structure. Indeed, a number of comments in the Task Force survey noted that previous programs had been discontinued or were limited to only monthly offerings due to volunteer availability. These findings exemplify the need for policies that include financial and staffing considerations if these programs are to be sustainable over the long term.

**Culturally appropriate policies:**

This study found that a small percentage of respondents working in victim service reported fears about safety and fear/dislike of animals in the workplace as a barrier to including dogs. While the reasons for this finding remain unclear results from the qualitative analysis shed some light on this phenomenon. One respondent commented that the tribal council would oppose the inclusion of animals. As reported, the issue of cultural and personal differences regarding attitudes to animals was not addressed in the Task Force survey.

Aarons et al. (2011) point out that it is important to be cognizant of the fact that socialization and culture play an important role in determining the efficacy of any intervention. Not all people have warm associations with animals, and may indeed find their presence to be stress inducing. It should not be expected or implied that including

dogs will be appropriate or beneficial for all individuals. The lack of attention to cultural and personal differences in attitudes toward animals, and particularly dogs, is concerning as this is one aspect of human-animal relationships that is well-documented (Wilson, 2010).

In addition, the link between animal abuse and family violence has been well-established. Research has reported that child maltreatment can include and/or involve the abuse of the family pet (Ascione, 2005). Other studies have found that in some families in which child maltreatment and family violence occurs, the children may model the abuse by harming the family pet. Thus, although the decision to include a new therapeutic method or even a new technology primarily impacts those who use the innovation, the inclusion of dogs (or other animals) is more far reaching as the presence of animals can impact everyone in the system. Further, the presence of animals in the criminal justice setting may be contraindicated as some youth may be re-traumatized and others may pose a risk to the animals.

**Policies specific to the criminal justice system:**

Qualitative findings revealed that a number of respondents commented that "animals working in the courthouse setting should be trained by nationally recognized service dog organizations with specific standards and criteria") and also commented on the requirements of handlers ("It is also of great importance that dogs (other animals) working in this setting be handled by professionals in the criminal justice field to ensure confidentiality of sensitive information.. "). The last quote provides evidence of another

process of retrofitting program practices to the criminal justice setting from policies developed for unrelated purposes.

According to the ADA, a service dog is 'trained to do work or perform a task for a person with a disability' (ADA, Section 35.136). Furthermore, according to the ADA 2010 Revised Requirements, "The work or task a dog has been trained to provide must be directly related to the person's disability." Thus, the law provides for a person with a disability to be accompanied by a service dog in public spaces such as courtrooms, and government buildings. The provisions of the ADA are human rights provisions, not animal access provisions, and yet a number of private organizations that train and supply dogs for people with disabilities also imply that because the dog has received training as a service dog, the animal has public access rights. Some organizations, furthermore, charge substantial fees for dogs that, as this phrase demonstrates: "She was released from Guiding Eyes for the Blind," are deemed unfit for work as a service dog. This finding is particularly important as it highlights the crucial need for policies that are in compliance with federal, state and local laws.

This study found that a small percentage of respondents who reported working with dogs and working within legal settings indicated that opposition from defense attorneys and appellate issues were barriers to including dogs. At issue is whether defense attorneys will appeal guilty convictions in trials which include as dog by suggesting that the dog has prejudiced the jury in favor of a more helpless looking victim as noted in a number of appeals listed on the Courthouse Dogs website ([courhousedogs.org](http://courhousedogs.org)). A comparison of opposition to modifications to court procedures for the inclusion of other

'comfort items' such as a doll or stuffed animal could be a useful area of policy development.

In sum, a major implication emanating from the findings is that contextual factors must be considered when innovations are implemented in real world settings. Furthermore, findings suggest that policies regarding the inclusion of animals in the investigation and prosecution of child maltreatment must be based on evidence specific to this unique setting rather than on the assumption that 'animals are good for kids'. Policies need to focus on real world financial and staffing constraints. Due consideration must be given to the implementations processes separate from the intervention of dogs as judiciary aids particularly as it effects change in the formal atmosphere of the legal system. Additionally, it will be essential that the Court clarify the application of the ADA in terms of access accommodation for dogs working with a person with a disability and dogs that may have training as a service dog.

**Implications for research:**

Findings from implementation research have offered strong support for the premise that effective implementation is associated with better outcomes when programs are carefully implemented and free from serious implementation problems than when these circumstances are not present (Durlak & DuPre, 2008). Implementation has been important in research conducted on a wide variety of programs, providers, community settings, and outcomes.

The practice and science of implementation have improved to the point where more is known, but to bridge the gap between research and practice and to foster the

science of implementation in animal-assisted interventions, there is a need to be as empirically sound in choosing implementation strategies as in choosing interventions. Research on organizational constructs such as culture and climate, which has been developed over many decades in studies of other types of organizations, can guide the efforts of researchers who seek to gain a better understanding of strategies for disseminating and implementing animal-assisted interventions in human service organizations.

As suggested by the work of Hemmelgarn, Glisson, and James (2006), human-animal relationship and animal-assisted intervention researchers can incorporate a number of methods and constructs in animal-assisted intervention dissemination and implementation studies. For example, qualitative studies should evaluate the convergent validity of their assessments by using multiple methods of data collection (e.g., interviews, observations, document analyses, and surveys). Both quantitative and qualitative work should employ theory-driven analytic procedures. Whenever possible, comparison groups should be used in lieu of one-group designs to strengthen the confidence regarding the relationship between implementation and program outcomes. Each of these strategies can provide unique information about the impact of organizational context on the adoption and implementation of animal-assisted interventions in human service systems.

Finally, implementation research, whether health or human services, is necessarily multi-disciplinary and requires a convergence of perspectives. To tackle the challenges of implementation, Proctor et al. (2011) calls for collaboration and integration both within

and outside the research sphere. Researchers must work together across boundaries, for no one research tradition alone can address the fundamental issue of human service impact. Moreover, other scholars called for truly collaborative, innovative and interdisciplinary work to overcome implementation and dissemination obstacles. Implementation research requires a partnership of treatment developers, service system researchers, and quality improvement researchers.

Because no single university-based discipline or department is “home” to implementation science, this area would seem to be ripe for leadership from the field of social work. Social work's explicit and deliberate endorsement of a generalist perspective, which includes simultaneous focus on individual concerns and the environmental circumstances and public policies that surround them, is particularly suited to creating the partnerships required for purposes of advancing research on implementation. Implementation science is at a relatively early stage of development, and advancement of the field would benefit from the person-in-environment perspective of social work.

Social workers are particularly qualified to investigate the ways in which human service organizations structure and deliver services to identify impediments to effective collaboration. Moreover, social workers are skilled at developing effective interagency collaboration, and understand that this complex process needs to be fully supported in policy development and resource allocation.

This recommendation comes at a time when the field of social work is considering the relevance and importance of macro-level practice, according to Rothman (2012). In a member survey of the Association for Community Organization and Social

Administration (ACOSA), conducted in 2010---2011, Rothman reported that only 2.9 to 4.5% of social work graduate students were community or planning practice majors, with the focus among them on traditional community development and planning rather than social change.

However, taking a leadership role in the burgeoning field of implementation science would appear to be an important opportunity for the direction of macro practice, as this study has demonstrated. Although the majority of social work research focuses on outcomes of direct practice with families and individuals, the time may be right for giving macro intervention a prominent place in the profession and to invigorate a research agenda focusing on macro challenges. As the world moves forward to a " global community," opportunities for macro social work will expand on a community and societal scale as the impacts of environmental change, the influence of global markets, and political movements brought about through social networking will open up new opportunities for research and employment. As Mizrahi (2006) makes the case: "It is essential that schools of social work recruit and prepare professional practitioners skilled in organizing and planning to play a role in improving the social conditions of functional and geographic communities."

**Limitations:**

The results presented here are highly reflective of the challenges to using secondary data in social science and in studying emerging phenomena. Singleton and Straits (2005) observe that one of the more serious limitations of using secondary survey data is that the survey was not designed to answer the questions posed in the secondary



analysis. Furthermore, in research involving innovations, there is often limited data available for secondary analysis due to small sample sizes characteristically found in early studies. This factor has been frequently cited as a considerable problem for researchers interested in the animal-assisted interventions (Katcher & Beck, 2010; Wilson, 2010).

This study's primary limitation is its descriptive, rather than inferential, nature. The structure of survey questions resulted in categorical data which limited analysis to, for the most part, descriptive analysis. In other words, is impossible to establish causal or even the statistical significance of correlational conclusions among these variables with these limited data.

The extent to which the agencies responding are representative of all sites implementing dogs as judiciary aids is unknown, and thus no generalizations about the inclusion of dogs in the criminal justice investigation and prosecution system of child maltreatment can be made. Further, as with any self-selecting sample, there may be a bias toward those who feel strongly about the issue at hand. The nearly 100% agreement with the survey question, "Do you believe it would be valuable to have the assistance of a animal to help crime victims," suggests both coverage and sampling errors, which are generally seen as the main objections to employing online surveys (Dillman, 2009). This issue may be compounded by the low response rate achieved.

The child welfare and organizational implementation literatures have focused on the issue of survey non-response rates and report that factors related to organizational surveys (e.g., organizational management connection to potential respondents,

respondents beliefs about past performance with respect to inaction or action, and perception of risk associated with completing an organizational survey) frequently result in lower response rates than those reported for political polling or consumer survey (Rogelberg & Stanton, 2007). Furthermore, the literature reports that, unlike mail-based surveys, returning a Web-based survey (WBS) is less onerous, thus partially completed surveys are more likely to be returned (Baruch, & Holtom, 2008).

Recently, published research suggests a benchmark of approximately 35–40 percent response rate (Darlington, Feeney, & Rixon, 2005). There is a difference in individual return rates and return rates for individuals responding on behalf of an organization. For example, Huyghe et al. (2009) reported return rates as low as 13% for men surveyed at outpatient cancer centers, although Raho, Belohlav, and Fiedler (1987), reported a response rate of 20.6% to a survey sent to a nationwide, randomized sample of an association's members with different organizational affiliations and membership.

Although many surveys are used alone as an instrument of needs assessment, it is notable that this method is often combined with others. For example, Huyghe et al. (2009) employed a survey in conjunction with focus groups to justify establishing a reproductive health clinic at a comprehensive cancer center, and Smith, Lyon, Hardison, and Borgia (1995) used a survey combined with a Delphi technique for determining physician training needs for using an innovative approach to advanced dental procedures.

The survey used here lacks rigor due to poor questionnaire design. Multiple questions were double-barreled (asking two questions at once), and a number were poorly worded. The use of multiple response categories without options to rank choices or pick

the most important choice represent lost opportunities to infuse clarity into the information gained.

As in any discriminating test, the results are more powerful if the data allows for discrimination between two groups that are very similar. That is where the survey structure made it difficult to examine groups different from one another. For example, question 6 asked if the handler/owner worked with the dog in different roles but the survey never clarified what respondents should do if they worked with a dog in multiple settings and in different roles.

However, the results suggest that understanding the forces at play in complex human service systems may be an important area of focus for animal-assisted intervention studies. The richness and detail provided by the qualitative analysis resulted in a number of important observations that bear investigation in future studies. The study design enabled the researcher to compare both forms of data to search for congruent findings (e.g. how themes identified in the qualitative data compared with results of the quantitative data). Hence, while these data provide a foundational picture of what is currently happening in this field, further research is required to develop an understanding of how these elements impact the criminal justice processes associated with child maltreatment and how staff, and victims and their families experience the inclusion of dogs in this setting.

The findings related to reported barriers and the issues important to respondents including dogs or considering including dogs indicate that implementation research can be important to the field of animal-assisted interventions. In addition, these findings can

be considered in light of the inconsistent outcome findings in animal-assisted intervention studies. It may well be that the implementation has failed rather than that the animal-assisted intervention failed.

From an implementation point of view, doing more and better research on a program or practice itself does not lead to more successful implementation (Stith et al., 2006). A series of meta-analyses of efficacy and effectiveness trials and detailed assessments of the strength of research findings for certain practices and programs may help a consumer, agency, or community select a program. However, more data on program outcomes will not help implement that program. Implementation is an entirely different enterprise (Glisson et al., 2008).

## **Chapter Six: Conclusions**

Child welfare researchers are increasingly exploring organizational influences on the implementation of new methodologies and technologies aimed at improving the criminal justice process in child maltreatment. There is evidence that the organizational context of human service systems affects the nature of the services provided by those systems. Studies of children's service systems, in particular, have linked organizational culture and climate to service provider attitudes, staff turnover, service quality, and service outcomes. For example, Yoo, Devoll, and Rino (2007) theorized that the variance in client service outcomes could be predicated upon child protective services workplace conditions. Moreover, evidence from a variety of studies outside of human service suggests that organizational culture and climate are especially important factors in determining the successful adoption of new technologies (Hemmelgarn, Glisson, & Dukes, 2001)

Additional studies have demonstrated that attention to the implementation process is particularly important in the complex environments of child welfare agencies, where legal and clinical outcomes for children and families are often viewed as interdependent with the administrative and policy contexts of agencies (Aarons & Sawitzky, 2006; Crea et al. 2011). These findings are similar to other innovation implementation research on the difficulties encountered in complex environments.

The trajectory of the development of animal-assisted interventions is similar to the way in which the field of human services has developed. There is tremendous promise in the area of animal-assisted interactions, accordingly, the challenges facing the field are the same as those seen in the development of any innovative intervention or practice. Fortunately, there is now a science to developing new models of intervention, and animal-assisted interventions must begin to employ this scientific model.

Although a relative paucity of animal-assisted intervention practices exist specific to the field of child welfare, the findings of implementation literature across a wide range of fields suggest that innovation implementation is most successful when it targets multiple levels (Proctor et al. 2011). That is, implementation strategies must take into consideration both micro- and macro-level barriers, as well as particular strengths within a site to aid successful implementation (Fixsen, Blasé, Naoom, Friedman, & Wallace, 2005).

To move the field of animal-assisted intervention forward, of utmost importance is the careful definition of the role and goals expected from programs involving contact with animals, as well as a need for clearly defined protocols and stated outcomes that are relatively impervious to expectancy and demand effects, as well as self-report or personal interest biases. Additionally, it will be important to begin to define and account for implementation factors that can impede or support the implementation of animal-assisted intervention programs.

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## Appendix A

### NDAAs Survey

The National Center for Prosecution of Child Abuse, a program of the National District Attorneys Association, is collaborating with Pet Partners (formerly Delta Society) and animal-assisted therapy professionals in a task force to assess specific needs of agencies utilizing or considering therapy animals in the criminal justice system. We would appreciate your input on this brief survey to help us in our work. Please respond to the survey by Friday, June 22nd at 5pm (eastern). The survey should take approximately 5-7 minutes to complete. Thank you!

1. Where do you work?
  - District Attorney's Office
  - Children's Advocacy Center
  - Law Enforcement Agency
  - Courthouse (Administration)
  - Courthouse (Judiciary)
  - Child Protection Agency
  - Other (Please list in comment section)
2. Does your agency or office currently use the services of an animal to help crime victims? If yes, indicate the animal(s). If no, please proceed to question 7.
  - Dog
  - Cat
  - Other (Please list in comment section)
  - No (Please go to question 7)
3. How many animals assist your agency? \_\_\_\_\_
4. Do the animals have a handler or owner? If yes, please pick appropriate choice.
  - Volunteer (from outside your agency)
  - Social Worker (Staff person)
  - Attorney (Staff person)
  - Law Enforcement (Staff person)
  - Forensic Interviewer (Staff person)
  - Victim Advocate (Staff person)
  - Administrative (Staff person)
  - Other (Please list in comments section)
  - No
5. Are the animals trained and registered/certified with an organization? (check all that apply):
  - Pet Partners (Formerly Delta Society)
  - Therapy Dogs, Inc.
  - Therapy Dogs International
  - Love on a Leash
  - Canine Companions for Independence
  - Other (Please mention in comments section)
  - No, the animal is not registered! certified with an organization

6. In what areas do the animals provide assistance? (check all that apply)
- As a greeter for victims
  - In therapy sessions
  - In forensic interviews
  - During medical examinations
  - During court preparation
  - During courtroom testimony
  - During non-courtroom testimony (depositions, etc.)
  - Other (please list in comments)
7. If you are currently incorporating an animal/handler team, or are interested in doing so, please tell us what is important to your office (check all that apply):
- Animal/handler team that is trained and registered with a national organization
  - Animal/handler team that has received additional training on working in the criminal justice system
  - Animal that has been tested around children
  - For accessibility, an animal that is allowed to work “off leash” with victims and agency staff
  - For safety, an animal that is always “on leash” with his/her handler
  - A team of animals of different breeds and temperaments to be matched to each victim’s needs
  - Animal/handler team that can help at no cost
  - Animal/handler team that comes with liability insurance
  - More than one animal/handler team to work with your office
  - Other (mention in comments)
8. If your agency has not considered or included animals into your work, please explain why (check all that apply):
- Budget constraints
  - Opposition from office management
  - Opposition from risk management/liability insurer
  - Opposition from judiciary
  - Opposition from defense attorneys
  - No animal/handler teams in the area
  - Concerns about safety
  - Concerns about allergies
  - Concerns about appellate issues
  - Fear/dislike of animals in the workplace
  - Other (please explain in comments)
9. Do you believe it would be valuable to have the assistance of a animal to help crime victims?
- Yes
  - No
  - Undecided
10. NDAA is part of a task force that will be creating additional standards to enhance the standards set forth in Therapy Animals Supporting Kids (TASK) Program. Would you be interested in receiving a copy? If yes, please provide your email address
11. If we have additional questions regarding your existing program, may we contact you? If yes, please enter your email address.
12. Comments



## Appendix B

### Frequencies of survey items used in this study

<u>Item</u>	<u>Response Choices</u>	<u># Responding</u>	<u>% Response</u>
<b>Q1. Where do you work?</b>		<b>292</b>	<b>100%</b>
	1. District Attorney's Office	134	4.86
	2. Children's Advocacy Center	51	18.8
	3. Law Enforcement Agency	31	10.6
	4. Courthouse (Administration)	1	.34
	5. Courthouse (Judiciary)	7	2.13
	6. Child Protection Agency	14	4.24
	7. Other	61	21.58
<b>Q2. Does your agency or office currently use the services of an animal to help crime victims?</b>		<b>284</b>	<b>97.3%</b>
	1. Dog	52	18.1
	2. Cat	5	1.8
	3. Other	5	1.8
	4. No	225	79.2
<b>Q4. Do the animals have a handler or owner? (If "No" skip to Question 7).</b>		<b>69</b>	<b>23.6%</b>
	1. Volunteer (from outside your agency)	21	30.4
	2. Social Worker (Staff person)	7	10.1
	3. Attorney (Staff person)	3	4.6
	4. Law Enforcement (Staff person)	7	10.1
	5. Forensic Interviewer (Staff person)	6	8.7
	6. Victim Advocate (Staff person)	9	13
	7. Administrative (Staff person)	8	11.5
	8. Other	16	23.1
	9. No	8	11.5
<b>Q6. In what areas do the animals provide assistance?</b>		<b>63</b>	<b>21.6%</b>
	1. As a greeter for victims	40	63.5
	2. In therapy sessions	22	34.9
	3. In forensic interviews	21	33.3
	4. During medical examinations	5	7.9
	5. During court preparation	28	44.4
	6. During courtroom testimony	15	23.8
	7. During non-courtroom testimony	12	19.0
	8. Other	15	23.3

Appendix B (cont'd)

<u>Item</u>	<u>Response Choices</u>	<u># Responding</u>	<u>% Response</u>
<b>Q7. If you are currently incorporating an animal/handler team, or are interested in doing so, please tell us what is important to your office</b>		<b>224</b>	<b>76.7%</b>
1.	Animal/handler team that is trained and registered with a national organization	107	47.7
2.	Animal/handler team that has received additional training on working in the criminal justice system	122	54.4
3.	Animal that has been tested around children	179	79.9
4.	For accessibility, an animal that is allowed to work "off leash" with victims and agency staff	111	49.6
5.	For safety, an animal that is always "on leash" with his/her handler	39	17.4
6.	A team of animals of different breeds and temperaments to be matched to each victim's needs	59	26.3
7.	Animal/handler team that can help at no cost	156	69.64
8.	Animal/handler team that comes with liability insurance	132	58.9
9.	More than one animal/handler team to work with your office	34	15.2
10.	Other	17	7.5
<b>8. If your agency has not considered or included animals into your work, please explain why</b>		<b>187</b>	<b>64%</b>
1.	Budget constraints	97	51.8
2.	Opposition from office management	26	13.9
3.	Opposition from risk management/liability insurer	22	11.7
4.	Opposition from judiciary	16	8.5
5.	Opposition from defense attorneys	12	6.4
6.	No animal/handler teams in the area	69	36.9
7.	Concerns about safety	43	22.9
8.	Concerns about allergies	48	25.7
9.	Concerns about appellate issues	18	9.6
10.	Fear/dislike of animals in the workplace	31	16.5
11.	Other	48	24.6
<b>12. Comments (Used as qualitative data)</b>		<b>129</b>	<b>44.1%</b>