Human-Animal Interaction Bulletin
2013, Vol. 1, No. 2, 82-97

When do psychologists pay attention to children harming animals?

Signal, T. & Ghea, V.
Department of Psychology, School of Health & Human Services, CQUniversity, Rockhampton, Australia, QLD 4702

Taylor, N.
Department of Sociology, Flinders University of South Australia, GPO Box 2100, Adelaide SA 5001

Acutt, D.
Department of Psychology, School of Health & Human Services, CQUniversity, Rockhampton, Australia, QLD 4702

Intentional cruelty to animals (CTA) by children and the implications thereof have been examined theoretically and empirically for many years, and there is now a well-developed literature base suggesting that this type of aberrant behavior warrants close (and immediate) attention, especially from clinicians, for a number of reasons. Research suggests there may be links between CTA and later aggression and/or violence towards humans as well as other problematic behaviors. Despite this the main diagnostic tool for most practising psychologists in Australia, the *Diagnostic and Statistical Manual of Mental Disorders-IV-TR* (American Psychological Association (APA), 2000), only includes CTA as a diagnostic feature in Conduct Disorder (CD). One implication of this limited inclusion may be that psychologists overlook disclosures of CTA in cases where CD is not indicated, thereby missing an important 'red flag' for other behavioral and emotional disturbances and/or abuse. The current study presents the findings from a survey completed by a sample of practicing psychologists in Queensland, Australia (n=69) that uses two vignettes (drawn from real case studies) to investigate the attention paid, and importance ascribed, to disclosures of intentional animal harm and the psychologists' intentions to treat CTA. While there was a high level of agreement across the sample regarding the key clinical indicators (and suggested diagnosis) for each vignette, most of the participants endorsed CTA as a key indicator only within the vignette that met the criteria for a CD diagnosis. Even when CTA was acknowledged as a significant indicator, few listed it as a primary area for intervention. The implications of this along with the differing patterns of endorsement across regional/rural and metropolitan-based psychologists are discussed.

Corresponding author: Dr. Tania Signal, Department of Psychology, School of Health & Human Services, CQUniversity, Rockhampton, QLD 4702, Australia
Email: t.signal@cqu.edu.au

Acknowledgements: The authors acknowledge support from the parks foundation grant which funded this research & IHSSR, CQUniversity, summer scholarship for D. Acutt

Animal cruelty has been defined as "...socially unacceptable behavior that intentionally causes unnecessary pain, suffering, or distress to and/or death of an animal" (Ascione, 1993, p. 228). Deliberate cruelty to animals (CTA) committed by children has been the focus of numerous research endeavors, both theoretical and empirical, all of which indicate the serious implications of this aberrant behavior (Becker & French, 2004). CTA is recognized across a range of disciplines as being of major concern not only for the health and welfare of the animal victim (Benetato, Reisman, & McCobb, 2011; Flynn, 2000; Taylor & Signal, 2008) but also for the psychological, physical, and social wellbeing of the perpetrator (e.g., Currie, 2006; Henry, 2004) and for society generally (Hensley, Tallichet, & Dutkiewicz, 2009; McPhedran, 2009). While acknowledged as a behavior that is challenging to define, isolate, explain, and rationalize (Ascione, 2001; Benetato et al., 2011; Gleyzer, Felthous, & Holzer, 2002; Hensley et al., 2009), it is also seen as a behavioral anomaly that requires urgent recognition, prevention, and intervention (Arluke & Lockwood, 1997; Flynn, 2000; Merz-Perez, Heide, & Silverman, 2001).

Correlates/Consequences of childhood CTA

Nearly five decades ago, Margaret Mead (1964, p.21) stated "The worst thing that can happen to a child is for him to harm an animal and get away with it. Animal cruelty kills respect for life." In more recent decades, the concept of the 'Link' (i.e., that engagement in CTA is related in some manner to propensity for violence against humans more generally) has been explored from a number of perspectives including psychology, sociology, and social work. While early researchers attempted to derive a predictive relation between a 'triad' of maladaptive behaviors including animal cruelty, fire setting, and enuresis, and subsequent adulthood aggression and criminality, there has been little experimental evidence to suggest that the triad has much predictive utility (see Felthous & Kellert, 1987 for a review). Indeed, researchers have subsequently called into question the existence of the triad itself with some suggesting that situational and environmental factors are more predictive of future violence than are the behaviors within the triad (e.g., Slavkin, 2001).

Despite this, research into the links between CTA and potential risks for human directed violence has burgeoned. Underpinning all ideas of the 'Link' are two separate, but related, theses: the graduation thesis and the desensitization (sometimes called generalization of deviance) thesis. The graduation thesis is based on the idea that those who deliberately harm animals will graduate to the deliberate harm of humans. While the concept of the graduation thesis still garners much media attention, recent research has focused on the idea that childhood CTA should be seen in terms of a generalization of deviance (e.g., Arluke, Levin, Luke, & Ascione, 1999). The proposition here is that CTA should be seen as one aspect of a range of maladaptive (antisocial) behaviors that heighten the risk for adulthood antisocial behavior (Dadds, Turner, & McAloon, 2002). For example, when Arluke et al. (1999) examined the criminal records of 153 individuals prosecuted for acts of animal cruelty and a matched sample of individuals with criminal records but no CTA convictions, they found that those who had abused animals were significantly more likely to be involved in other criminal activity (including violent interpersonal behavior). Instances of animal cruelty were found to be no more likely to precede, than follow, other criminal activity for the CTA cohort. Thus, CTA was part of a general pattern of deviance rather than a pre-cursor or initial point in a trajectory of anti-social behavior. Recent research also suggests that simply witnessing animal abuse during childhood significantly increases the

likelihood of engaging in such abuse (Thomson & Gullone, 2006) and is a strong predictor of engaging in bullying behaviors outside of the home (Gullone & Robertson, 2008).

Many researchers have noted, however, that not all children who abuse animals become juvenile offenders or adult criminals. Many do not come from dysfunctional, violent families, and indeed appear to be 'normal' or 'typical' (e.g., Flynn, 2000, 2001; Miller & Knutson, 1997; Randour, 2007). According to Dadds et al. (2002), certain features of childhood CTA have been suggested to be more meaningful when assessing the predictive utility of animal abuse, namely direct involvement in CTA, impulsivity, lack of remorse, variety of cruel acts, the species targeted (especially the inclusion of family pets), and the motivations behind the cruelty. Ascione, Thompson, and Black (1997) derived 13 developmentally-related CTA motivations from case reports and interviews with children engaging in animal abuse. These motivations included curiosity/exploration, mood enhancement (i.e., relief of boredom), peer pressure, sexual gratification, abuse (and displaced hostility resulting from same), post-traumatic play, imitation, self-injury, and rehearsal for interpersonal violence.

Based on these derived motivations and experiences of animal protection professionals, Ascione (2001) proposed three general taxonomies for childhood animal abusers: (1) Exploratory/Curious, (2) Pathological, or (3) Delinquent. In the first category the children are generally very young (i.e., pre-school) and are typified by having little understanding of animal needs and being poorly supervised. Ascione (2001) suggests that Humane Education interventions would be one way to reduce the prevalence of animal abuse in which children within this group participate. Although literature specifically examining the outcome for children in this category is limited, it would seem likely that this type of CTA is the most amenable to intervention.

In the pathological category, children are generally older (although see the discussion regarding age below), and CTA is indicative of some form of psychological disturbance (e.g., CD, empathy deficit, attachment disorders). Researchers have suggested that CTA may be a marker for particularly severe CD that is associated with heightened risk for future violence, (e.g., Frick et al., 1993; Luk, Straiger, Wong, & Mathai, 1999). In a review of the literature linking CTA and family violence, McPhredran (2009) suggested that the presence of childhood CTA was a marker for a poorer prognosis, particularly when associated with a younger age of onset (i.e., <8 years). Importantly CTA for children in this group may also be a result of abuse; specifically researchers report that children who abuse animals are often victims of sexual or physical abuse themselves (Currie, 2006). It is with respect to this that disclosure of childhood CTA should also be viewed as a 'red flag' warranting further attention/investigation, regardless of any other presenting behaviors or indicators (e.g., DeGue & DiLillo, 2009). Ascione (2001) suggests that professional clinical intervention is needed to reduce animal abuse by those falling within this group.

Individuals in the delinquent CTA group are generally adolescents who engage in a range of antisocial behaviors (Ascione, 2001). Often animal abuse is carried out with peers and may form part of initiation rituals. Membership in this group is highly correlated with risk for adulthood criminality and interpersonal violence. Ascione further suggests that judicial and clinical intervention is required to reduce animal abuse within this cohort.

It must be noted that age alone is not sufficient for membership in any of these categories. For example, those with developmental delays may fall within the exploratory/curious typology despite being older in age (Ascione, 2001). CTA is also often one of the first CD symptoms observed.

Norris and Wilson (2003) mention a median reporting age of onset of animal cruelty of about 6.5 years, which is earlier than the median age for first report of bullying, cruelty to humans, vandalism, or arson.

Psychology and CTA

Currently, childhood CTA is only recognized as a symptom of CD; it is not listed as a diagnostic criterion for any other psychopathology in the *Diagnostic and Statistical Manual of Mental Disorders-IV-TR* (APA, 2000). Childhood CTA is considered one of 15 antisocial behaviors related to CD that are judged to be a "...repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated" (APA, 2000, p.98). It was first considered and listed as a specific behavior in 1987 in the DSM-III (revised). However, as cited in Duncan and Miller (2002), its existence and persistence is considered a precursor in many cases of Adult Antisocial Personality Disorder (ASPD) (APA, 2000).

Identifying CTA as an observer can be very challenging (McPhedran, 2009) for a number of reasons, including the often solitary nature of CTA, embarrassment/shame on behalf of the witnessing parent/caregiver, and definitional issues regarding what constitutes CTA (Ascione, 2005). Awareness and acknowledgement of childhood CTA first and foremost is the responsibility of those people in close proximity to the child (e.g., parents, neighbours, teachers) (Dadds et al., 2002). Once the behavior has been recognized, however, the child needs to be referred to professional practitioners for evaluation and intervention (Dadds et al., 2002).

Schaefer, Hays, and Steiner (2007) randomly (via mail) surveyed American therapists (96% of whom held Doctoral degree level qualifications) and reported that nearly 30% of their sample (of 174 therapists) reported dealing with animal abuse issues within therapy sessions and that most viewed CTA as a mental health issue that warranted attention. They concluded however that while "[c]ruelty and abusive behavior directed toward animals is a form of abuse that is relevant for many clients … it is one that often remains undisclosed, unrecognized, and untreated in therapy" (p.530). In a similar vein, Randour (2007) suggested that until 'professional organizations' of psychologists recognize the importance of CTA, many will not enquire about or pursue disclosures of CTA. Following this logic it is possible that the current diagnostic system that most Australian and American clinicians utilize is limiting the 'questions' which psychologists ask. That is, it may be that psychologists only pay attention to CTA disclosures (i.e., only ask the question) when other markers of CD are present. This is not to say that clinicians are in error or being remiss; instead, it may be that the current 'professional organization' as represented in the current DSM (APA, 2000) is unintentionally creating a barrier to considering CTA as an indicator worthy of consideration regardless of other presenting behaviors.

The aim of the current pilot project was two-fold, firstly to investigate the attention paid, and importance ascribed, to disclosures of CTA by practicing psychologists. Secondly, to ascertain intentions to treat CTA once such disclosures are identified in a sample of registered and practicing psychologists in Queensland, Australia (n=69). This was achieved by analyzing responses to two vignettes (drawn from real case studies). The two vignettes were both of young boys (aged 8 and 10), one of whom met the criteria for Attention Deficit Disorder (ADD) while the other met the criteria for Conduct Disorder (CD). It was anticipated that (1) psychologists would pay more attention (i.e., as a key indicator) to the disclosure of CTA within the CD than the ADD vignette, and (2) that they would ascribe more importance to CTA and indicate a higher likelihood of deliberate

intervention regarding CTA within the CD vignette as a result of the DSM IV TR diagnostic criteria.

Method

Participants

Sixty-nine psychologists registered to practice in Queensland returned completed questionnaires. The average age of respondents was 46 years (range: 24-87 years); the majority were female (78%); and most had been registered as practitioners for more than 10 years (84%). Approximately half of the participants worked in a Metropolitan area (n=35, 51%), and 49% worked in a Regional/Rural setting (n=34). Thirty-five (51%) held the minimum 4-year University degree + 2-year supervised practice experience needed to be registered as a non-specialised psychologist in Queensland, 24 (35%) had a Master's degree; and nine (13%) reported having a PhD or equivalent. Forty-one percent of respondents worked in private practice (n=28); 29% in a state government organization (n=20); 13% in an NGO setting (n=9); and 17% (n=13) in a university context.

Materials

The research package contained an information sheet, consent forms, questionnaire, and two vignettes. Information supplied to potential participants included an introduction outlining the project as a study assessing the importance of, and level of priority afforded to, indicators of psychological disturbance in children. The stated aim of the study was to increase understanding of "behavioral warning signs of emotional and/or psychological disturbance" in young people. The two vignettes were derived from the second author's (VG) practice experience. The first vignette presents 'Justin' an 8-year-old boy with characteristic symptoms of Attention Deficit Disorder (ADD) and CTA. The second vignette presents 'Sam' a 10-year-old boy with characteristic symptoms of Conduct Disorder (CD) including CTA. Copies of the vignettes are included in Appendix A. Participants were informed that the survey should take no more than 20-25 minutes to complete.

Identical questions (see Appendix B) appeared after each vignette designed to elicit (a) preliminary diagnosis "According to my own view, I would provide a preliminary diagnosis of [CD; ADD; Other]", (b) the three key indicators for the diagnosis and, of these, the most and least important indicators, and (c) the three primary areas recommended for intervention and, of these, the most and least important areas for intervention. Questions in (b) and (c) were answered by selecting from the following list of options: Non-compliance, aggressive outbursts, family dysfunction, animal cruelty, or difficulty sustaining attention. Participants were then asked how important it would be to address the disclosure of CTA on a 4 point Likert scale (1=Very Unimportant to 4=Very Important) and the likelihood of including a specific treatment for CTA in an overall treatment plan (1=Very Unlikely to 4=Very Likely).

Procedure

Following receipt of ethical approval (CQU HREC H08/09-051) potential participants were identified by accessing a publicly available database of psychologists registered to practice in Queensland, Australia (N=4,000), and details (name and postal address) from this registry were entered into an Excel spreadsheet. Using the random number generator within Excel a sample of 500 Psychologists were selected for inclusion in the study. These 500 were sent a questionnaire package and a postage paid return envelope. Due to an error in the printing and sending of packets, it proved impossible to track who did or did not respond. As a result, although intended, a reminder letter regarding the research was not mailed. A relatively low response rate of 13.8% was recorded.

Results

As can be seen in Table 1, the majority of participants preliminary diagnoses matched that intended (i.e., ADD for Justin and CD for Sam), albeit with a greater degree of variability for Justin. Demographic variables (e.g., age, location, length of time practising) were not systematically related to diagnostic decision for either vignette. Of the 'Other' diagnoses for Justin, most listed 'Reactive Attachment Disorder' which was also endorsed for Sam along with Oppositional Defiant Disorder (ODD).

Table 1
Preliminary diagnosis for Justin (ADD) and Sam (CD)

	Justin	Sam
CD	19% (13)	80% 55)
ADD	57% (39)	1% (1)
Other	13% (9)	14% (9)
Declined to nominate	12% (8)	6% (4)

Importantly, almost all of those who suggested that Justin met the criteria for CD included CTA as one of their primary indicators (n=10, 77%), while only one of those suggesting a preliminary diagnosis of ADD did so. The three most commonly endorsed 'important indicators' for Justin (across all participants regardless of tentative diagnosis) were disruptive behavior (n=51, 79%), difficulty sustaining attention (n=48, 74%), and non-compliance (n=42, 65%). Family dysfunction (n=19, 28%) and CTA (n=16, 23%) were the most frequently selected as 'least important indicator'. In contrast, for Sam the three most commonly endorsed 'important indicators' were; CTA (n=55, 83%), aggressive outbursts (n=54, 82%), and disruptive behavior (n=35, 53%). For Sam the 'least important indicator' was his difficulty sustaining attention (n=42, 61%).

Difficulty sustaining attention (n=43, 62%) and disruptive behavior (n=41, 59%) reappeared as the top two areas for intervention for Justin, with family dysfunction (n=39, 57%) rating as the third most important area for intervention. Interestingly, although family dysfunction was not an important indicator for diagnosis, it is an area warranting *primary* intervention. Justin's CTA was the least endorsed area for primary intervention, except for those who suggested a CD diagnosis. In those cases CTA was listed as the second most important area for intervention (second only to aggressive outbursts). For Sam, the three most endorsed 'primary intervention areas' were aggressive outbursts (n=60, 90%), CTA (n=45, 67%), and family dysfunction (n=35, 52%).

Presented in Figures 1 and 2 are the responses to the last two questions of the survey, "How important would it be to address the issue of Justin/Sam's CTA?" and "What is the likelihood of including a specific intervention for CTA in Justin/Sam's intervention plan?" In both instances there was a statistically significant difference in the pattern of responding ($t_{\text{importance}}[66]=-3.713$, $p=0.000$; $t_{\text{likelihood}}[68]=-5.725$, $p=0.000$). Participants deemed addressing CTA to be more important for Sam (CD) than Justin (ADD), and they were much more likely to include an intervention for CTA for Sam. Indeed, only 18 (26%) stated that they would be very likely to treat Justin's CTA compared to 38 (55%) stating they would for Sam. Of those who did state that they would be likely or very likely to treat Justin's CTA, all indicated that CTA was a primary factor in their diagnosis.

Only two variables significantly impacted stated 'Likelihood to include intervention' for Justin, and none were significant for Sam. Those who indicated an initial diagnosis of CD for Justin (out of CD/ADD/Other) were significantly more likely to endorse a specific intervention ($F(2,60)=3.964$, $p=0.024$) for CTA than those whose preliminary diagnosis was ADD (mean plots indicated similar endorsement by those selecting 'Other' to those who selected ADD). Locality also

proved a significant factor for Justin. That is, those that reported working in a Metropolitan area were significantly more likely to endorse including a CTA intervention for Justin ($t(67)=-2.360$, $p=0.021$) than those in non-Metropolitan locales

Discussion

The main hypothesis, that psychologists would pay more attention to CTA disclosures within the vignette aligned to a CD rather than an ADD diagnosis, was fully supported. Over 80% of participants indicated that CTA was an indicator of *primary* importance within the 'CD' vignette (Sam), while less than a quarter indicated that CTA was one of the *least* significant behavioral indicators within the 'ADD' vignette (Justin). While the majority of the participants indicated a tentative diagnosis in line with that intended, it is worthy of note that all bar one of those who endorsed a CD diagnosis for Justin included CTA as one of their primary indicators. This further supports the supposition of the current project – that symptom delineation as presented in the DSM encourages the acknowledgment of CTA when it is presented amongst behaviors that meet the criteria for CD. Similarly, it is also clear from this project that the adherence to DSM criteria, or at least the focus that diagnostic structures such as the DSM have within current training programs, may be constraining acknowledgement of CTA when it is presented amongst behaviors that *do not* meet the criteria for CD. Given the literature (e.g., DeGue & DiLillo, 2009) that suggests CTA is a 'red flag' for a number of issues ranging from empathy deficits, through socio-emotional difficulties, to indicators of potential violence/abuse in the child's environment, this low level of attention to CTA disclosure outside of the CD vignette is concerning. That current professional orientation (as represented by the DSM-IV TR) may be restricting consideration of this important marker of individual pathology is an issue that needs to be addressed, particularly in the area of training for clinicians (Randour, 2007).

Participants' stated priority areas for intervention logically followed the primary indicators they endorsed. That is, Sam's CTA was seen as in need of primary intervention by two-thirds of the psychologists (second only to his 'aggressive outbursts'). In contrast the majority of participants suggested that CTA was, for Justin, the area 'least in need of intervention'. The exception to this was, again, those who suggested a CD diagnosis for Justin. When asked how important it would be to *specifically* address the disclosures of CTA, regardless of what other behaviors were deemed of primary importance for intervention, participants were significantly more likely to address disclosures of CTA with Sam (CD) than Justin (ADD). Indeed, only those who suggested that CTA was a factor in their diagnosis for Justin endorsed the need to address his CTA.

These findings echo those of Schaefer et al. (2007) and suggestions by Randour (2007). That is, although CTA is often present in the histories of clients, it often goes unrecognized and untreated potentially due to common diagnostic 'professional' systems (Randour, 2007). This is a serious issue for a number of reasons. For example, overlooked CTA may continue and become part of adult pathology (Duncan & Miller, 2002); it may escalate in frequency and/or severity with obvious consequences for the animal victims (e.g., Benetato et al., 2011); or it may be related to an increased propensity for other antisocial behavior (e.g., Gullone & Robertson, 2008; Hensley et al., 2009). Childhood CTA in and of itself may be an indicator of child abuse (e.g., Currie, 2006) or exposure to a violent family dynamic (e.g., Baldry, 2003). CTA is therefore a behavior that should be addressed as an indicator of anomalies that may have occurred in the child's environment. In this respect CTA can be seen as a valuable indication that something is in need of attention and treatment and could well become

a diagnostic tool in and of itself, *irrespective* of its relationship to CD.

While these findings suggest that changing the 'professional organization' (i.e., DSM criteria) may promote greater awareness of CTA amongst psychologists, the current data also suggest that the location of the psychologist was related to 'intent to treat CTA'. That is, those psychologists whose practice was located in a Metropolitan area were significantly more likely to endorse implementing a specific treatment for the CTA disclosed (with the CD vignette). Given that the diagnosis assigned to each vignette was statistically unrelated to demographic factors, this finding may reflect the level of resources (or lack thereof) available to psychologists outside of the main urban areas when it comes to providing targeted interventions for childhood CTA. Or it may be indicative of the well documented utilitarian /pragmatic attitude to animals among those in rural areas (Signal & Taylor, 2006). This finding requires further research.

As raised in a recent article by Black, Chur-Hansen, and Winefield (2011), however, training opportunities for clinicians regarding appropriate treatment for CTA or inclusion of some type of animal-assisted or animal-directed therapy within a specific treatment plan are lacking in Australia. Thus, although some of the current participants indicated an 'intent to treat CTA', it is unclear what this treatment would be. Programs such as AniCare (www.animalsandsociety.org) which are available in America are relatively unknown in Australia and animal assisted psychotherapy programs remain rare. What constitutes effective training in specific therapeutic approaches for addressing CTA in children is an area in need of further research. Equally there is a need for more research into what type of therapy is appropriate for the different 'types' of childhood CTA (i.e., exploratory/curious, pathological, delinquent) and the long-term effectiveness of these therapies.

The relatively low return rate, and resultant small sample, in the current study is an obvious limitation. While the final sample was roughly representative of the range of psychologists registered to practice in Queensland according to statistics available for 2010 from the Psychology Board of Australia (e.g., gender-wise, 24% of Queensland registered psychologists and 22% of the current sample were male), and the number of complete surveys was large enough for the analyses chosen, the small sample size does suggest limited generalizability. The finding that psychologists rarely demonstrate concern for CTA unless it is connected directly to CD, however, is of considerable import given the extant research which points to links between CTA and other problem behaviors. Future research recruiting a larger sample and potentially examining in more detail intention to treat and what that treatment might be would be beneficial.

A further limitation of the current study is that both vignettes used male clients. While cognisant of this potential bias, we decided to only look at male clients in order to avoid introducing a further variable. In other words, we were more interested in the current study to determine links between the professional ethos which associates CTA only with CD, than we were in determining a full list of the variables which might also impact this. Further analysis of the role of client gender within diagnoses is clearly needed, as much of the extant research on the 'link' between human and animal violence follows the traditional criminological bias by focusing on male perpetrators of violence. Given that researchers are suggesting that gender roles are not only dynamic but that what is considered 'masculine' and/or 'feminine' has been converging over the past 50 years (and will continue to do so, e.g., Diekman & Eagly, 2000) it follows that girls' experiences of CTA (both witnessing and perpetrating) warrant further attention.

In summary, as hypothesized, psychologists appear to be limiting their

exploration of CTA disclosures to clients who meet certain diagnostic ‘structures’. This, in turn, limits potential treatment options and effectively limits the attention being paid to a behavioral indicator that may be particularly useful when working with young clients. Despite the forthcoming changes to the DSM (5th Edition; www.dsm5.org), it is unlikely that much will change regarding wider inclusion of CTA. Embedding awareness of the importance of CTA disclosures within training programs for psychologists and simutaneously distributing research via professional organisations about the importance of addressing CTA are actions essential to ensuring that this particular ‘red flag’ isn’t routinely overlooked.

References

American Psychological Association (2000). *Diagnostic and Statistical Manual of Mental Disorders (4th ed., text rev.).* Washington DC: Author.

Arluke, A., Levin, J., Luke, C., & Ascione, F. (1999). The relationship of animal abuse to violence and other forms of antisocial behavior. *Journal of Interpersonal Violence, 14(9),* 963-975.

Arluke, A., & Lockwood, R. (1997). Guest editors' introduction: Understanding cruelty to animals. *Society & Animals, 5(3),* 183-193.

Ascione, F. (1993). Children who are cruel to animals: A review of research and implications for developmental psychopathology. *Anthrozoös, 6,* 226-247.

Ascione, F. (2001). Animal abuse and youth violence. *OJJDP: Juvenile Justice Bulletin, September*, 1-15.

Ascione, F.R. (2005). *Children and animals: Exploring the roots of kindness and cruelty.* West Lafayette, IN: Purdue University Press.

Ascione, F., Thompson, T., & Black, T. (1997). Childhood cruelty to animals: Assessing cruelty dimensions and motivations. *Anthrozoös, 10(4),* 170-182.

Baldry, A. (2003). Animal abuse and exposure to interparental violence in Italian youth. *Journal of Interpersonal Violence, 18,* 258-281.

Becker, F., & French, L. (2004). Making the links: Child abuse, animal cruelty and domestic violence. *Child Abuse Review, 13,* 399-414.

Benetato, M., Reisman, R., & McCobb, E. (2011). The veterinarian's role in animal cruelty cases. *Journal of the American Veterinary Medical Association, 238,* 31-34.

Black, A.F., Chur-Hansen, A., & Winefield, H.R. (2011). Australian psychologists' knowledge of, and attitudes towards, animal-assisted therapy. *Clinical Psychologist, 15*, 69-77.**7**

Currie, C.L. (2006). Animal cruelty by children exposed to domestic violence. *Child Abuse & Neglect, 30,* 425-435.

Dadds, M.R., Turner, C., & McAloon, J. (2002). Developmental links between cruelty to animals and human violence. *Australian and New Zealand Journal of Criminology, 35*, 363-382.

DeGue, S., & DiLillo, D. (2009). Is animal cruelty a "red flag" for family violence? Investigating co-occurring violence towards children, partners, and pets. *Journal of Interpersonal Violence, 24,* 1036-1056.

Diekman, A., & Eagly, A. (2000). Stereotypes as dynamic constructs: Women and men of the past, present, and future. *Personality & Social Psychology Bulletin, 26,* 1171-188.

Duncan, A., & Miller, C. (2002). The impact of an abusive family context on childhood animal cruelty and adult violence. *Aggressive and Violent Behavior, 7,* 365-383.

Felthous, A.R. & Kellert, S.R. (1987). Childhood cruelty to animals and later aggression against people: A review. *American Journal of Psychiatry, 144,* 710-717.

Flynn, C. (2000). Battered women and their animal companions: Symbolic interaction between human and non-human animals. *Society & Animals, 8(2),* 99-127.

Flynn, C. (2001). Acknowledging the "zoological connection": A sociological analysis of animal cruelty. S*ociety & Animals, 9,* 71-87.

Frick, P.J., Horn, Y.V., Lahey, B.B., Christ, M.A.G., Loeber, R., Hart, E.A., Tannenbaum, L., & Hanson, K. (1993). Oppositional defiant disorder and conduct disorder: A meta-analytic review of factor analyses and cross-validation in a clinic sample. *Clinical Psychology Review, 13,* 319-340.

Gleyzer, R., Felthous, A.R., & Holzer, C.E. (2002). Animal cruelty and psychiatric disorders. *Journal of the American Academy of Psychiatry and Law, 30*, 257-265.

Gullone, E., & Robertson, N. (2008). The relationship between bullying and animal abuse behaviors in adolescents: The importance of witnessing animal abuse. *Journal of Applied Developmental Psychology, 29*, 371-379.

Henry, B. (2004). The relationship between animal cruelty, delinquency, and attitudes toward the treatment of animals. *Society & Animals*, *12(3)*, 185-207.

Hensley, C., Tallichet, S.E., & Dutkiewicz, E.L. (2009). Recurrent childhood animal cruelty: Is there a relationship to adult recurrent interpersonal violence? *Criminal Justice Review, 34*, 248-257.

Luk, E.S., Staiger, P.K., Wong, L., & Mathai, J. (1999). Children who are cruel to animals: A revisit. *Australia and New Zealand Journal of Psychiatry, 33(1),* 29-36.

McPhedran, S. (2009). Animal abuse, family violence, and child wellbeing. *Journal of Family Violence, 24*, 41-52.

Mead, M. (1964). Cultural factors in the cause of pathological homicide. *Bulletin of the Menninger Clinic*, *2*, 11-22.

Merz-Perez, L., Heide, K., & Silverman, I.J. (2001). Childhood cruelty to animals and subsequent violence against humans. *International Journal of Offender Therapy and Comparative Criminology*, *45(5)*, 556–573.

Miller, K.S., & Knutson, J.F. (1997). Reports of severe physical punishment and exposure to animal cruelty by inmates convicted of felonies and by university students. *Child Abuse & Neglect 21(1)*, 59-82.

Norris, G., & Wilson, P. (2003). Relationship of criminal behavior and mental illness in young adults: Conduct Disorder, cruelty to animals and young adult serious violence. *Psychiatry, Psychology and the Law*, *10(1)*, 239-243.

Randour, M.L. (2007). Integrating animals into the family violence paradigm: Implications for policy and professional standards. *Journal of Emotional Abuse, 7(3)*, 97-116.

Schaefer, K.D., Hays, K.A., & Steiner, R.L. (2007). Animal abuse issues in therapy: A survey of therapists attitudes. *Professional Psychology: Research and Practice, 38*, 530-537.

Signal, T., & Taylor, N. (2006). Attitudes to animals: Demographics within a Community sample. *Society & Animals, 14(2)*, 147-158.

Slavkin, M.L. (2001). Enuresis, firesetting, and cruelty to animals: Does the ego triad show predictive validity? *Adolescence, 36(143)*, 461-466.

Taylor, N., & Signal, T. (2008). Throwing the baby out with the bathwater: Towards a sociology of the human-animal abuse 'link'. *Sociological Research Online, 13*, (1/2).

Thompson, K., & Gullone, E. (2006). An investigation into the association between the witnessing of animal abuse and adolescents' behavior toward animals. *Society & Animals*, *14*, 223-243.

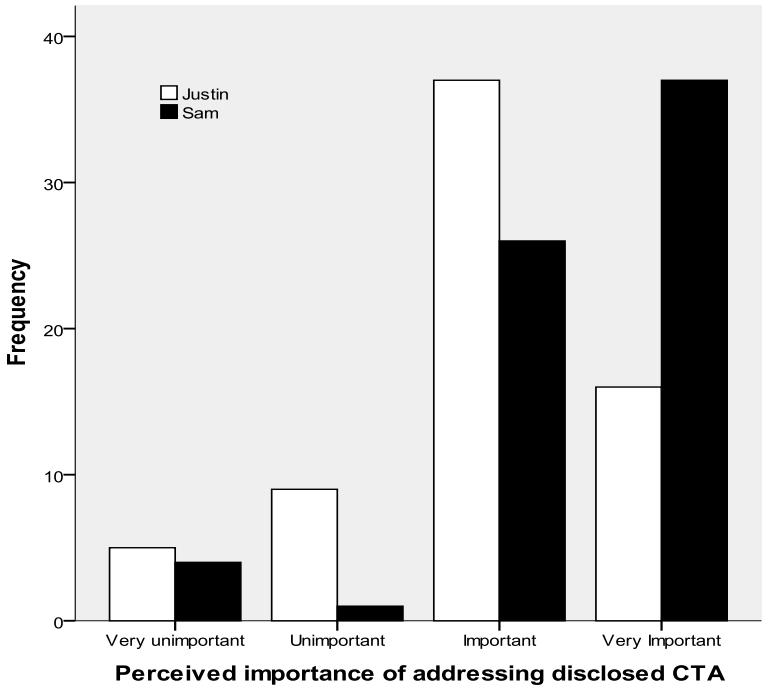

*Figure 1.*Perceived importance of addressing disclosed CTA across both vignettes.

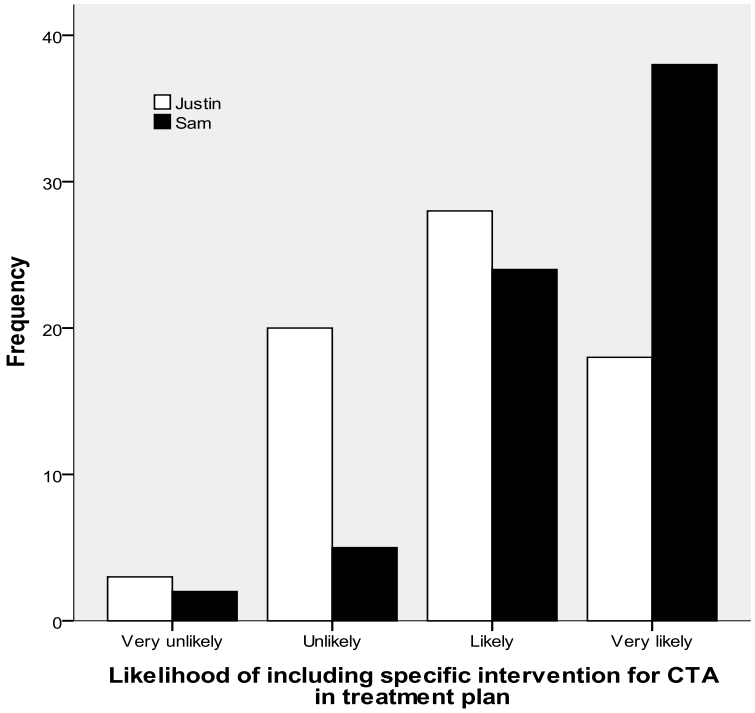

Figure 2. Likelihood of including a specific intervention for disclosed CTA in a subsequent treatment plan across both vignettes.

Appendix A

Vignette One:

Justin is an eight-year-old boy referred to the psychologist by his general practitioner. His teachers are concerned about poor academic progress and report that he is uncooperative, does not listen, distracts others, and has begun to act the "class clown". His mother is finding it increasingly difficult to cope with his behavior as he is non-compliant, has aggressive outbursts, and often seems unhappy. His father is not concerned, stating by telephone, "There's nothing wrong with him. I don't want him drugged!"

Justin's parents separated when he was a toddler, and there may have been some domestic violence. He has a 13-year-old sister and a 10-year-old brother, who are both "doing well". All children live with their mother. Their parents do not speak to each other. Justin did not see his father much between the ages of two and six years, but they have had semi-regular contact over the past two years.

Justin's mother suffered postnatal depression after the births of her children and was prescribed antidepressants when Justin was three months old. She has taken them intermittently ever since. Justin's father did not like school and left at age 15. He is literate but disorganised, and goes from one short-term job to another. He binge drinks.

Justin was a challenging child to care for from the age of 10 months when he began walking. According to his mother, he had some delay in language development. She further advised that Justin suffered from bedwetting until he was 6 years of age and often teases his siblings relentlessly. His mother also stated that Justin typically complains of being bored and on numerous occasions has been sent to his room for throwing the family's pet cat over the neighbour's fence to watch the dog attack it.

When Justin began school his teachers reported regular episodes where he appeared to be agitated and restless. He constantly fidgeted and was easily distracted by things going on around him. His school report cards consistently indicated that Justin had difficulty sustaining attention in tasks or play activities, and in fact would often avoid tasks that required sustained mental effort (such as schoolwork or homework). Further, his teachers noted that Justin did not seem to listen when he was spoken to directly, and failed to follow through on instructions. Justin was often sent to the office for disruptive behavior, and on one occasion his mother was called to the school because Justin had for no apparent reason physically hit another child.

Further recent information from the classroom teacher revealed that Justin is unable to work out and stick to a plan for getting his work done. He dawdles, plays with objects in his desk, looks around the room, and accomplishes very little during the study time allocated. Justin's mother reported that he has recently been suspended for taking a 'sling shot' to school and using it to 'shoot' birds on the school oval. While doing this, he 'accidentally' shot a fellow classmate resulting in a small, but severe cut to her forehead. Justin demonstrated some remorse, apparently apologising to the girl and stating that it was an accident.

Vignette Two:

Ten-year-old Sam was born to Erin, an unmarried 16-year-old girl who chose to keep him and try to raise him herself. She lived with her parents and continued to attend high school after Sam's birth. She was very irresponsible, earned no money, contributed little to her upkeep, and smoked marijuana with her friends. Most of Sam's care was delegated to his grandparents. When Sam was 3 years old, his grandparents refused to tolerate their daughter's irresponsible behavior any longer, and she and Sam were forced to leave the home.

Erin found employment as a waitress, leaving Sam with neighbors, babysitters, or whomever she could find who was willing to take him in while she was at work. She was eventually reported to the Department of Child Safety by her landlady, who discovered that Erin was leaving Sam in the house alone for periods of time while he was asleep. Sam was placed in foster care and lived in numerous homes for the next several years.

Sam suffered from nightmares and childhood enuresis and became very oppositional with adults. He bullied his foster siblings and the neighborhood children. At age 8, he was sent to the school principal's office for giving a schoolmate a black eye and bloody nose. He has no friends, is disruptive in class, disobeys school rules, verbally abuses the teachers, and steals from the other children. Yet he totally denies any wrongdoing, always blaming others for his behavior. The neighborhood children say Sam was responsible for injuring his neighbor's puppy with a hammer, although he firmly denies it, and there is no positive proof.

One of his foster carers reported that she witnessed Sam hitting a new-born puppy against a pole. According to this same foster carer, Sam did this because the puppy's whimper was annoying him.

Sam has undergone intelligence testing, administered by the school psychologist, and the results indicated above average intelligence. However, Sam is failing in his coursework, and he has already been kept back a grade in school. He was admitted to the psychiatric unit after being implicated by police in a fire that destroyed an abandoned garage; his schoolmates state that Sam was bragging that he "could burn the place down." Sam is sullen and oppositional and continues to state that he has done nothing wrong.

Appendix B

Questions

1. According to my own view, I would provide a preliminary diagnosis of _____ for X?
[Conduct Disorder/Attention Deficit Disorder/Other (please identify)]

2. In the case of X, the THREE key indicators that contribute to my chosen diagnosis are:
[Disruptive behavior/Non compliance/Aggressive outbursts/Family dysfunction/Animal cruelty/Difficulty sustaining attention]

3. In the case of X, I consider the ***most important*** indicator for my chosen diagnosis to be (please select one indicator only):
[Disruptive behavior/Non compliance/Aggressive outbursts/Family dysfunction/Animal cruelty/Difficulty sustaining attention]

4. In the case of X, I consider the ***least important*** indicator for my chosen diagnosis to be (please select one indicator only):
[Disruptive behavior/Non compliance/Aggressive outbursts/Family dysfunction/Animal cruelty/Difficulty sustaining attention]

5. Based on the information presented for X the THREE primary areas I would recommend for intervention include:
[Disruptive behavior/Non compliance/Aggressive outbursts/Family dysfunction/Animal cruelty/Difficulty sustaining attention]

6. From the list below, the area I consider to be the ***most important*** when considering intervention for X is:
[Disruptive behavior/Non compliance/Aggressive outbursts/Family dysfunction/Animal cruelty/Difficulty sustaining attention]

7. From the list below, the area I consider to be the ***least important*** when considering intervention for X is:
[Disruptive behavior/Non compliance/Aggressive outbursts/Family dysfunction/Animal cruelty/Difficulty sustaining attention]

8. In the case of X, how important would it be to address the issue of his animal cruelty?
[Very unimportant/Unimportant/Important/Very important]

9. In the case of X, what is the likelihood that you would include a specific intervention for animal cruelty in an overall treatment plan?
[Very unlikely/Unlikely/Likely/Very likely]