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Facility dogs as a tool for building rapport and credibility with child witnesses

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The interviewing of victims and witnesses is a crucial part of the police investigation process (Williamson, 2007), as these interviews are essential in gathering the intelligence and evidence necessary for charging and prosecuting criminal offences. In fact, witness interviews are often one of the most vital pieces of evidence to help a case seek justice (Gudjonsson, 2006). As such, witness accuracy and completeness are essential factors in determining a successful outcome of a case (Forrester et al., 2001). While every legal system may differ in specific practices and procedures for police interviews, the importance placed on them is universal, with each legal system providing guidance to assist interviewers in obtaining quality evidence which meets the necessary thresholds to be included in relevant proceedings (Bull, 2014). For example, in England and Wales, the *Achieving Best Evidence (ABE) in Criminal Proceedings*, set out by the Ministry of Justice (MoJ; Ministry of Justice, 2011), provides comprehensive guidance to assist those responsible for conducting police interviews (also known as forensic interviews). Guidelines such as these highlight key components to obtaining best evidence, which often include: establishing good rapport, obtaining as much free narrative as possible, asking questions to clarify and/or challenge the account, and ensuring there is a meaningful closure to the interview (Bartels, 2011).

Whilst developments are continuously made in relation to witness interviewing, the process is far from accommodating to all witnesses. Hence, it is key to continue gathering best practice evidence by evaluating new techniques which could aid the interviewing process. The aim of the current research is to provide the first evaluation of practitioner perspectives of utilising specially trained dogs (also known as facility dogs) during child witness interviews in a range of jurisdictions. As the service is gaining traction and is being explored across the world, developing knowledge of the utility of the service by frontline practitioners is important in developing best practice guidelines and enabling professionals to follow the agenda of professionalising police practices.

1. The police interview

Obtaining sufficient evidence is one of the most difficult tasks for any police investigation, as the interviewer is often a stranger to the witness, yet they are charged with gathering pertinent and detailed information, often of a sensitive nature (Milne and Bull, 1999). Witnesses are asked to recount the minute aspects of the crime, including what they were wearing, their behaviour towards the suspect and specific personal details (Jordan, 2011). It is also vital that the information gathered is legitimate and credible, as in the absence of corroborating evidence, witness credibility is considered the most critical factor in decisions to arrest and present cases to prosecutors, as well as for any consequent court processes (Campbell et al., 2015). Research on conveying credibility has suggested that clear and fluent communication, along with maintaining a relaxed and confident state, are key factors (Boccaccini and Brodsky, 2002). Providing a complete and logical account, while also appearing genuine, are also important indicators of witness credibility (Lievore, 2004).

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However, findings relating to witness credibility contrast human reactions to having to relive some of the most difficult experiences of one's life. Whilst giving evidence, witnesses have a heightened level of stress that is exacerbated by their traumatic experiences (Campbell and Wasco, 2005); this is especially true for children, who are limited in their cognitive and social-emotional development (Collins et al., 2014). Police interviews demand a level of honesty, openness and effort from children, something that is rare in typical interactions with strangers, as children are accustomed to speaking with those they know well about topics that are private, upsetting or frightening. Gaining trust and cooperation from a child is therefore often harder for interviewers, which can impact on the testimony that children provide (Saywitz et al., 2015). A similar trend can be seen with populations who were witnesses to particularly traumatic offences, those with mental health disorders, the elderly, and other vulnerable populations, as their ability to give evidence is diminished by their abilities (Bull, 2010).

2. The importance of rapport for child witnesses

As a result, over the past decade, research on how to elicit reliable and credible testimonies from children has been heavily explored (Lamb et al., 2008). Children who are most likely to take part in a police interview often have a greater need for rapport-building due to their previous experiences. In particular, children who have gone through a traumatic event (i.e., physical, sexual abuse) or have experienced maltreatment (i.e., neglect), have more difficulty establishing an alliance with professionals (Eltz et al., 1995; Wilson and Powell, 2012), such as police officers, as they often have low expectations about developing high levels of rapport with adults (Bretherton and Munholland, 2008). In order to counter such resistance, one of the main focuses within the literature has been on the rapport phase of an interview and the importance of developing a good relationship with the child (Saywitz et al., 2015). Establishing good rapport has even been described as the 'heart of the interview' (St-Yves, 2009). Many legal professionals advocate that for children, rapport is the most critical element of a police interview and is key to gaining a child's cooperation and trust (Greenspan and Greenspan, 1991). Research shows that when children feel safe and accepted in an interview, they respond more openly and honestly, as it helps to frame their focus, allowing them to communicate more effectively (Vanderhallen et al., 2011). From a legal perspective, this then translates to increased recall accuracy and completeness (Hershkowitz, 2011). Establishing rapport can also help reduce a child's anxieties and stress (Almerigogna et al., 2007), making them feel more comfortable during the police interview (Brown et al., 2013; Hershkowitz, 2009, 2011). This means that successful rapport building is among the core factors relating to being likely to engage with the professional and the investigative processes, as well as being less likely to become further traumatised by the process (Wilson and Powell, 2012).

Accordingly, for young victims and witnesses, establishing rapport is an essential part of police interview guidelines internationally (e.g., American Professional Society on the Abuse of Children, 2012; Ministry of Justice, 2011; Scottish Executive, 2011). Interviewers and children will typically spend time getting to know each other prior to the substantive part of the interview, often called the 'rapport phase'. This generally occurs at the start of the process, when the interviewer sets ground rules for the interview, while also explaining its purpose and the importance of telling the truth (Ministry of Justice, 2011). Despite the consensus that rapport is an essential factor to ensuring a successful interview with children, various guidelines suggest different strategies (e.g., Abbe and Brandon, 2012; Cepeda, 2010; Hershkowitz et al., 2006; Sattler and La Mesa, 1998; Saywitz; Camparo, 2014). For example, the *Achieving Best Evidence in Criminal Proceedings* (Ministry of Justice, 2011) protocol simply recommends conversation on a neutral topic that puts the child in a positive mind set. The National Institute of Child Health and Human Development (NICHD) however, advises a more formal approach, which begins with a general discussion about a child's hobbies and likes, followed by prompts about neutral past events (Brown et al., 2013). In contrast, the Scottish Executive (2011) guidelines recommend carrying out a practice interview on a neutral past event, while components of rapport often note a number of strategies for children, including: using humour, showing warmth and empathy, or play activity (e.g., Cepeda, 2010). While there are discrepancies across guidelines in regards to specific strategies, there is a general consensus that an open-ended style of rapport building is important, as it not only allows for the witness to feel more comfortable and in control, but it also helps to foster more complete and accurate accounts from young witnesses (Roberts et al., 2004).

That being said, there is still a general lack of clarity in terms of appropriate rapport strategies for police interviews, how we measure the effectiveness of these strategies, and how well interviewers actually build rapport with witnesses (Abbe and Brandon, 2012; Saywitz et al., 2015). Based on the literature above, it could be argued that rapport is often judged to be 'effective' when witnesses convey credibility (e.g., clear and fluent communication, relaxed and confident state, complete and accurate account). To date, however, few attempts have been made to explore specific rapport approaches (e.g., Roberts et al., 2004) and their effectiveness in terms of witness credibility. These deficits in current literature therefore set the premise for the present study, which explores an innovative method of enabling best evidence to be gained, including improving the rapport-building stage, that has been successfully utilised in legal systems across North America.

3. The use of facility dogs in police interviews

For over 15 years, legal professionals in North America have been utilising specially trained 'facility dogs' (type of an assistance dog; for a thorough discussion, see Spruin and Mozova, 2018) to help build rapport and facilitate communication with children (Burd and McQuiston, 2019). Facility dogs are professionally trained to provide non-judgmental companionship to witnesses going through the criminal justice process, assisting them to remain calm so that they can cognitively process and coherently communicate their evidence (Spruin et al., 2016). These dogs are graduates of training schools accredited by Assistance Dogs International (ADI), and while they have the same degree of training as service dogs (e.g., guide dogs, hearing dogs), unlike service dogs, who are trained to help one person with a disability, facility dogs work alongside legal professionals, assisting many people. The dogs receive a minimum of 18 months training, which involves learning how to quietly support those experiencing stress and working in a range of high-stress environments, this ranges from joining witnesses in police interviews, to offering support in actual court settings and medical examinations (Spruin and Mozova, 2018). Typically, when facility dogs are used in these environments, the witness may simply hold the leash in their hands, providing them with a sense of control, or physical contact can be maintained (e.g., the dog can lay down next

et al., 2016). While the use of facility dogs is a novel idea in many countries, including the UK and the rest of Europe, the practice has been widely successful across the United States (229 dogs in 40 states) and Canada (45 dogs in 8 provinces) for many years (Courthouse Dogs Foundation, 2019).

Although robust empirical evidence on the use of facility dogs is lacking, the limited research that has been carried out highlights the positive impact these dogs can have on vulnerable witnesses. For instance, research has indicated that these dogs can create a calmer and more comfortable interview environment for vulnerable witnesses (Spruin, Mozova, Dempster and Freeman, in press). More specifically, for child witnesses, research has further shown these dogs to have a stress reducing effect on children undergoing police interviews (Krause-Parello et al., 2018). This research is further supported by the abundance of anecdotal evidence in the area, gathered through stories shared by those who have witnessed the benefits and descriptions of single cases. This evidence has highlighted the impact these dogs have on building rapport and increasing witness credibility. For example, facility dogs have shown to reduce witness stress (Herzog, 2010), increase relaxation and confidence (Dellinger, 2009; Holton, 2015), and make witnesses feel more comfortable with the interviewer, thereby allowing them to communicate more clearly (Spruin et al., 2019), all of which are key aspects of rapport building (Wilson and Powell, 2012) and witness credibility (e.g., Boccaccini and Brodsky, 2002). The benefits facility dogs have had on helping children feel more comfortable and communicate more easily, are so significant that lawyers across North America have been encouraging the introduction of these dogs across legal systems worldwide (Bowers, 2013).

The general benefits of the human-canine relationship provide further support to the above. Dogs have been used to promote therapeutic outcomes for years with children (Daly and Morton, 2006). For example, dogs have been used with clinicians as a tool to help decrease anxiety and stress in children, increase their self-esteem (Turner, 2007; Wells, 2009) and provide comfort and emotional support (Risley-Curtiss et al., 2013; Risley-Curtiss et al., 2010). Other research with children has found that dogs can help children with coping and global functioning with life events (O'Haire et al., 2015). For children experiencing a traumatic event, dogs have been shown to help reduce negative affect and distressing symptoms. Through their unconditional acceptance and support, dogs have also been shown to increase trust building in survivors of trauma (Hamama et al., 2011) and help to build rapport in children who have been abused and struggle to trust others (Crenshaw, 2011). In fact, research has found that after only 5 min of contact with an unfamiliar dog, 76% of children between the ages of 7 and 15 believed that a dog knew how they felt. Also, 84% indicated that they would confide secrets to a dog (Melson and Fogel, 1996). This high level of trust is thought to be in large part due to the evolutionary bond that exists between humans and dogs (Coppinger and Coppinger, 2001). As a result, dogs naturally play a role in facilitating trust and attachment (Yang et al., 2013) and are able to create instant bonds with people, eliciting immediate feelings of safety and security (Burrows et al., 2016). These brief examples of the impact that dogs have on children in terms of providing emotional support and facilitating trust, provide a clear indication of the usefulness they could have in building rapport and witness credibility within police interviews.

4. Evaluating rapport building techniques

Overall, while there is a considerable amount of research highlighting the importance of rapport-building within police interviews, very little is known about the strategies that interviewers should use to prepare children for the substantive phase (Teoh and Lamb, 2010). Even though guidelines and policy documents consistently make a point of needing to establish rapport, interviewers are rarely provided with evidence-based techniques enabling them to do so, with research more so focusing on the importance of rapport itself (e.g., Collins et al., 2002) or overall interviewing techniques (e.g., Memon, 2010). Further, research has highlighted rapport building to be one of the key weaknesses of even advanced interviewers (Griffiths, 2008). However, whilst training interviewers does include information on rapport building (Yi et al., 2017), there has been no research investigating the impact that specific rapport strategies could have on witness credibility and the interview process. Considering the importance placed on rapport building and the anecdotally documented success of utilising facility dogs in interviews, to date, there has been no empirical research investigating the perceived impact these dogs have on rapport and the interview process.

The policing profession across the globe operates under the professionalization and evidence-based umbrella (e.g., Green and Gates, 2014; Lum; Koper, 2017). With that, utilising best available evidence as an addition to professional experience is key in successful decision making in all areas of criminal investigation (O'Neill, 2018). Therefore, evaluating strategies from a variety of viewpoints, including those of practitioners, is pertinent. Considering the wide use of facility dogs, pushes to spread the service more widely across the world, and embedding it into legislation, the purpose of the current study was to examine practitioner perspectives of the impact a facility dog can have on rapport and witness credibility during police interviews with child witnesses. Based on the aforementioned literature, it was hypothesised that respondents would perceive the presence of a facility dog as a positive tool for building rapport with child witnesses. It was further hypothesised that respondents would perceive the presence of a facility dog would enable child witnesses to provide a more credible account during a police interview.

5. Method

5.1. Design

A simultaneous mixed method design composed of non-experimental and phenomenological designs was utilised in this study. Considering the lack of knowledge in the area, it was important to assess the service using both quantitative and qualitative designs in order to allow for generalisations but to also add a level of depth to the findings which can aid in furthering the social justice agenda (Fassinger and Morrow, 2013).

5.2. Participants

A total of 70 participants ($n = 9$ male; $n = 61$ female) took part in the study, of which, $n = 23$ (32.9%) work in Canada and $n = 47$ (67.1%) work in the United States. The majority of the participants described their ethnicity as white ($n = 60$;

as Black/African American ($n = 4$; 5.7%), American Indian/Alaskan Native ($n = 2$; 2.9%), or ‘other’ ($n = 4$; 5.7%). In order to take part, respondents needed to have experience of interviewing child witnesses, both with and without the use of a facility dog. The purposive sample was therefore recruited through snowball sampling of existing contacts and professional facility dog organisations (i.e., Facility Dog Community, Courthouse Dogs Foundation). The majority of the respondents were therefore employed as either interviewers/interview specialists ($n = 29$; 41.4%) or police officers/investigators ($n = 20$; 28.6%), with the remaining respondents being employed as advocates ($n = 7$; 10%), or working within a managerial-type role ($n = 14$; 20%). As can be seen from Table 1, respondents’ experience with police interviews ranged from 9 months to 30 years ($Mean = 8.3$ years; $SD = 6.2$) and the number of police interviews they reported performing in an average week ranged from 1 to 20 ($Mean = 5.2$; $SD = 4.4$). The length of time the respondents had been working with facility dogs in their interviews ranged from 4 months to 8 years ($Mean = 2.9$ years, $SD = 2.0$) and the frequency with which they utilised facility dogs in their police interviews ranged from ‘rarely’ to ‘always’. As can be seen from Fig. 1, nearly a third of the participants ($n = 21$; 30%) said that they used facility dogs in a third or less of their police interviews, $n = 7$ (10%) said that they used them in half of their police interviews, and nearly half of the sample ($n = 31$; 44.3%) said that they worked with a facility dog in their police interviews always/almost always (unless there was an allergy, phobia, or animal abuse history that made the presence of a dog unwise). A further $n = 7$ respondents (10%) gave answers too vague to quantify (i.e., ‘varies’, ‘whenever dog requested’, ‘whenever dog deemed appropriate’, and ‘whenever dog available’).

Table 1
Overview of the respondents’ demographics and experience with police interviews.

Country of Residence	Job Type	Gender	Age	Number of Years' Experience with Police Interviews	Number of Years' Experience with Facility Dogs
Canada	Interviewers/ Interview Specialists	2 male;	$Mean = 38.5$ ($SD = 7.9$)	$Mean = 6.2$ ($SD = 3.1$)	$Mean = 3.3$ ($SD = 1.5$)
		4 female			
	Police Officers/ Investigators	3 male;	$Mean = 39.9$ ($SD = 6.2$)	$Mean = 7.25$ ($SD = 5.7$)	$Mean = 2.3$ ($SD = 1.7$)
		9 female			
	Advocates	3 female	$Mean = 58.0$ ($SD = 5.3$)	$Mean = 4.0$ ($SD = 4.2$)	$Mean = 1.0$ ($SD = .0$)
Managerial	2 female	$Mean = 62.5$ ($SD = 0.7$)	$Mean = 10.0$ ($SD = .0$)	$Mean = 1.0$ ($SD = .0$)	
United States	Interviewers/ Interview Specialists	1 male;	$Mean = 42.43$ ($SD = 10.1$)	$Mean = 8.0$ ($SD = 5.8$)	$Mean = 2.5$ ($SD = 1.7$)
		22 female			
	Police Officers/ Investigators	3 male;	$Mean = 43.9$ ($SD = 9.5$)	$Mean = 5.8$ ($SD = 2.0$)	$Mean = 4.3$ ($SD = 2.4$)
		5 female			
	Advocates	4 female	$Mean = 44.3$ ($SD = 11.1$)	$Mean = 13.3$ ($SD = 11.6$)	$Mean = 5.0$ ($SD = .0$)
Managerial	12 female	$Mean = 44.9$ ($SD = 8.1$)	$Mean = 11.9$ ($SD = 7.6$)	$Mean = 3.5$ ($SD = 2.4$)	

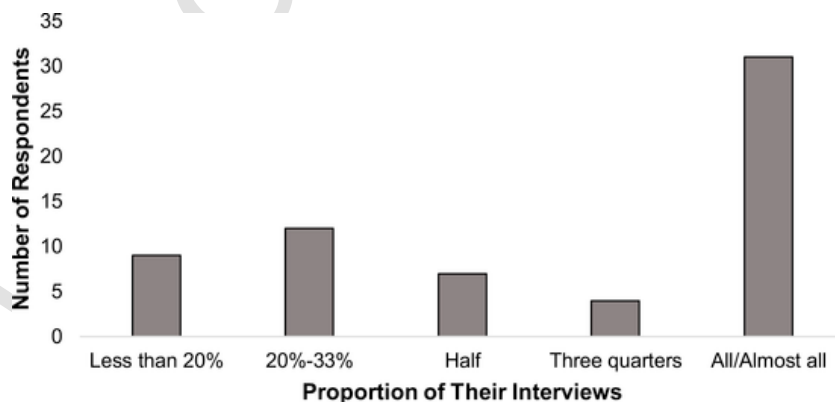


Fig. 1. The proportion of police interviews where respondents work with facility dogs.

6. Materials

Participants were asked to complete a survey consisting of both qualitative and quantitative questions. The first section of the survey asked respondents for demographic information, including personal details (i.e., gender, age, ethnicity, job title, place of residence) and information about their experience with police interviews (i.e., years conducting interviews, average number of interviews a week). Participants were further asked details about their experience working with a facility dog during their interviews (i.e., years working with a facility dog, how often they used the facility dog).

The second section consisted of 16 questions aimed at measuring witness credibility (8-items) and rapport building (8-items), from the perception of the respondents. Each question was measured on a 7-point Likert scale ('strongly disagree' to 'strongly agree').

The eight questions pertaining to credibility were derived from research on factors which constitute witness credibility (e.g., Bocaccini and Brodsky, 2002; Brodsky et al., 2010; Lievore, 2004), only those factors which were frequently cited across the literature were incorporated. These included questions relating to the following: witness disclosures, effective communication, consistency of account, providing a complete and logical account and maintaining a relaxed and confidence state. Each question was created in reference to the presence of a facility dog during the police interview (e.g., *'the presence of a facility dog allows for a more consistent account from the witness'*, *'the presence of a facility dog helps the witness feel more confident'*). The Cronbach's Alpha for this eight-item credibility scale was found to be $\alpha = .901$.

The eight questions relating to rapport building were created from guidelines on interviewing child witnesses (e.g., Ministry of Justice, 2011; NICHD, 2013; Scottish Executive, 2011). These guidelines highlight the significance that rapport-building can have on enhancing a child's well-being, increasing motivation and cooperation, building trust with the interviewer, focusing children on the interview, and providing a comfortable environment. Questions therefore focused on the impact a facility dog had on these main areas (e.g., *'the presence of a facility dog provides a more comfortable atmosphere for the witness'*, *'the presence of a facility dog helps the witness to cooperate more during interview'*). The Cronbach's Alpha for this eight-item rapport scale was $\alpha = .870$.

In addition to these 16-items, at the end of the survey, participants were asked an additional open-ended question about the impact, if any, they felt a facility dog had on police interviews with child witnesses (i.e., *'Do you feel facility dogs have an impact on rapport and credibility?' 'Do you have any other comments you would like to add?'*).

6.1. Procedure

As the study only recruited participants who had experience interviewing child witnesses with and without the use of a facility dog, all participants had knowledge and experience of these areas and were thus uniquely qualified to assess any perceived impact of the facility dog service. Possible participants were emailed explaining that the study aimed to obtain interviewers' anonymous opinions on the impact of facility dogs during police interviews with child witnesses. A link to the survey (via Qualtrics) and a brief introductory paragraph were also included in the email. If interviewers agreed to participate, they were instructed to click on the link provided. This brought them to an information sheet which informed them of the purpose of the study, procedure, voluntary participation, anonymity and confidentiality of their responses, and withdrawal procedures. If participants agreed, they were asked to provide consent, at which point they were directed to the survey to complete. Finally, they were thanked for their participation.

7. Results

7.1. Data analysis

The impact that respondents felt facility dogs had on rapport and enhancing credibility were first explored through the quantitative data collected. Possible scores on both the rapport scale and the credibility scale ranged from 8 to 56, with higher scores indicating higher levels of agreement. That is, higher scores indicated greater agreement that using a facility dog in police interviews helps build rapport with the witnesses and helps to improve the witnesses' credibility. The qualitative data was collected to help enhance the results that emerged from the quantitative data, through providing a deeper context into the perceived impact that participants felt facility dogs may have. A total of $n = 49$ (70%) respondents completed the open-ended question asked at the end of the survey. Thematic analysis was performed on these answers in order to identify commonly occurring patterns, or themes, in the data (see Braun and Clarke, 2006). To ensure that the study's hypotheses did not inadvertently influence the findings, a trained independent researcher unfamiliar with the aims and hypotheses of the study performed the analyses. The coding of themes was therefore carried out without knowledge of the project, ensuring a strong process of analytical credibility and reliability was sustained across the interpretation of the data (Gibbs, 2002). To begin, the independent researcher read and then re-read the data in order to familiarise themselves with the content, noting down initial thoughts. The researcher then re-read the data a third time, creating codes based on the topic of each line of data and then the codes were grouped together in order to identify potential themes and sub-themes. Only those themes which appeared in more than half of the cases are discussed within the results.

7.2. Rapport building

As can be seen from Table 2, all the respondents (100%) agreed that a facility dog provides a more comfortable atmosphere for witnesses during their police interviews and all but one participant (98.6%) agreed that using facility dogs in police interviews both enhances the witnesses' emotional wellbeing and allows the interviewer to build a better rapport with the witness. Over 95% of the respondents also agreed that they per-

Table 2
Respondents' Perceptions About the use of Facility Dogs for Building Rapport With Witnesses.

Item "The presence of a facility dog ..."	n (% of sample)						
	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
Provides a more comfortable atmosphere for a witness	0	0	0	0	2 (2.9%)	10 (14.3%)	58 (82.9%)
Enhances the emotional wellbeing of a witness	0	0	0	1 (1.4%)	5 (7.1%)	21 (30%)	43 (61.4%)
Motivates the witness to perform well during interview	0	1 (1.4%)	6 (8.6%)	21 (30%)	15 (21.4%)	13 (18.6%)	14 (20%)
Helps the witness to cooperate more during the interview	0	0	2 (2.9%)	14 (20%)	17 (24.3%)	21 (30%)	16 (22.9%)
Helps the witness to stay committed to the goals of the interview	0	3 (4.3%)	0	23 (32.9%)	16 (22.9%)	18 (25.7%)	10 (14.3%)
Allows the interviewer to build a better rapport with the witness	0	0	0	1 (1.4%)	10 (14.3%)	18 (25.7%)	41 (58.6%)
Helps build trust between the interviewer and witness	0	0	0	6 (8.6%)	12 (17.1%)	19 (27.1%)	33 (47.1%)
Helps the witness see the interviewer as a friendly and likeable person	0	0	0	3 (4.3%)	16 (22.9%)	19 (27.1%)	32 (45.7%)

ceived the presence of a facility dog to help witnesses see interviewers as friendly and likeable ($n = 67$; 95.7%) and over 90% agreed that they thought it helps the interviewer to build trust with the witness ($n = 64$; 91.4%). In-fact, the only items where a small minority of respondents showed any disagreement were to do with the witnesses' performance in the interview itself with 2.9% ($n = 2$) disagreeing that the presence of a facility dog helps witnesses to cooperate more in the interview, 4.3% ($n = 3$) disagreeing that they helped witnesses to stay committed to the goals of the interview, and 10% ($n = 7$) disagreeing that they motivated the witnesses to perform well during the interview.

Overall, the mean score for the rapport building scale was 47.7 ($SD = 5.7$), indicating that on average the respondents felt that the presence of a facility dog in their police interviews helped to build a good rapport with the witnesses.

7.3. Witness credibility

As can be seen in Table 3, all of the respondents (100%) agreed that having a facility dog in the police interviews enables witnesses to feel more relaxed during the interview. And nearly all of the respondents agreed that utilising facility dogs helps the witnesses to feel more confident ($n = 68$; 97.1%) and enables witnesses to both open up about their experiences ($n = 69$; 98.6%) and be more forthcoming with their disclosures ($n = 63$; 90%). In-fact, although 4 of the items were disagreed with by some of the respondents, the proportion who did so was always less than 3% of the sample. Specifically, only 2.9% ($n = 2$) of the respondents disagreed that utilising a facility dog helped witnesses to think more logically, only 2.9% ($n = 2$) of the respondents disagreed that the presence of a facility dog allows for a more consistent and a more complete account from the witnesses, and just 1 respondent (1.4%) disagreed that facility dogs enable witnesses to communicate more effectively.

Table 3
Respondents' Perceptions About the use of Facility Dogs for Building Rapport With Witnesses.

Item "The presence of a facility dog ..."	n (% of sample)						
	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
Provides a more comfortable atmosphere for a witness	0	0	0	0	2 (2.9%)	10 (14.3%)	58 (82.9%)
Enhances the emotional wellbeing of a witness	0	0	0	1 (1.4%)	5 (7.1%)	21 (30%)	43 (61.4%)
Motivates the witness to perform well during interview	0	1 (1.4%)	6 (8.6%)	21 (30%)	15 (21.4%)	13 (18.6%)	14 (20%)
Helps the witness to cooperate more during the interview	0	0	2 (2.9%)	14 (20%)	17 (24.3%)	21 (30%)	16 (22.9%)
Helps the witness to stay committed to the goals of the interview	0	3 (4.3%)	0	23 (32.9%)	16 (22.9%)	18 (25.7%)	10 (14.3%)
Allows the interviewer to build a better rapport with the witness	0	0	0	1 (1.4%)	10 (14.3%)	18 (25.7%)	41 (58.6%)
Helps build trust between the interviewer and witness	0	0	0	6 (8.6%)	12 (17.1%)	19 (27.1%)	33 (47.1%)
Helps the witness see the interviewer as a friendly and likeable person	0	0	0	3 (4.3%)	16 (22.9%)	19 (27.1%)	32 (45.7%)

Similarly to the rapport scale, the mean score for the witness credibility scale was 46.8 ($SD = 6.2$), which suggests that overall the respondents felt that utilising facility dogs in their police interviews enhances the credibility of the witnesses.

7.4. Rapport building, witness credibility, and experience

Correlational analyses were performed in order to see whether respondents' perceptions varied depending on their level of experience with interviewing or working with facility dogs. Respondents' 1) number of years interview experience, 2) number of interviews they conduct in an average week, and 3) number of years they have been working with a facility dog did not show any relationship with their perceptions of using facility dogs for rapport building nor for witness credibility (all $p > .2$).

The proportion of interviews where they utilised facility dogs, however, did show a significant positive relationship with perceptions of rapport-building. Specifically, the larger the proportion of interviews they utilised facility dogs for, the more likely they were to believe that the dogs help to build rapport with the witness, $r_s = .279$, $p = .027$. The relationship between witness credibility and the proportion of interviews utilising facility dogs showed the same direction; however, was only marginally significant, $r_s = .233$, $p = .066$. Additionally, credibility and rapport showed a significant, positive correlation with each other, $r_s = 0.806$, $p < .001$.

7.5. Qualitative data

The results presented above were further supported by participants' qualitative responses. The thematic analysis revealed that one of the most common responses was that respondents felt that the facility dog enhanced the children's ability to communicate and their willingness to disclose. The two main ways respondents thought that the dog facilitated communication was via increasing the children's confidence and helping them feel more relaxed, as one participant explained, '*[the facility dog] gives children the confidence to speak. I have seen many children shut down during a forensic interview, or write their interviews rather than say them. [The facility dog] helps them to speak and make disclosures*' (P25). Similarly, another participant elaborated by saying how '*[the facility dog] reduces the anxiety of the witnesses, and when a witness is less anxious they are more able to give an accurate and credible account, which benefits everyone involved and, most importantly, allows due process*' (P3).

The most popular method cited for how participants felt facility dogs helped to build rapport and/or enhance credibility, however, was by positively altering the children's emotions. One way was through decreasing negative emotions (anxiety, fear), as one participant explained; '*[the facility dog] makes the environment more comfortable and creates a more positive atmosphere, which helps with anxieties and also the fear that many children have about being interviewed*' (P31), and another by increasing positive ones (e.g., calm, relaxed), '*[the facility dog] not only changes how children view the process, but also improves their emotions and makes them feel more relaxed and confident*' (P11). With that, many of the comments made about altering emotional states were linked to the positive environment that the facility dog created for all those involved. One respondent explained how their '*facility dog has created a more friendly, comfortable atmosphere for all, not just the clients but their families and the people that work here. I have seen a dramatic effect on our team because of this dog*' (P15).

The overall positive effect that participants felt the facility dog had were echoed further by many respondents referring to the use of facility dogs as a '*fabulous service*' and '*amazing*' (e.g., '*There are no words, these dogs are amazing*'; '*This is a fabulous way to offer comfort to vulnerable people*'). Some respondents elaborated further by explaining how facility dogs are an '*invaluable resource for all victims/witnesses*' (P22), having a positive effect on vulnerable and child witnesses; '*It has changed the way we work with child victims. Am constantly amazed by how much he has helped us with children!*' (P46).

8. Discussion

The current study surveyed US and Canadian professionals working in the criminal justice system with child witnesses. All the respondents were experienced with interviewing child witnesses, both with and without facility dogs and were surveyed to find out what effect, if any, they perceived that the dogs' presence had on their ability to work with witnesses.

The results, consistent with our hypotheses, indicate that respondents believed that utilising facility dogs both enhanced witnesses' credibility and helped interviewers to build rapport with witnesses. More specifically, in terms of rapport building, the findings suggest that interviewers felt that the presence of a facility dog can provide child witnesses with a more comfortable environment, helping to decrease anxiety and enhance emotional well-being, thus enabling interviewers to build trust and establish a better rapport. All of these are essential factors of successful rapport-building, and are highlighted in several best practice guidelines on interviewing child witnesses (e.g., Ministry of Justice, 2011; NICHD, 2013). The results are also consistent with the body of literature which highlights the impact that establishing good rapport can have on building trust (Greenspan and Greenspan, 1991), enhancing wellbeing (Almerigogna et al., 2007), and making witnesses feel more comfortable (Brown et al., 2013; Hershkowitz, 2009, 2011). Interestingly, the more the respondents agreed that facility dogs facilitated rapport building, the greater the proportion of police interviews they were likely to utilise the dogs for. Research on rapport building in child interviews shows that interviewers who used their environmental surroundings as a tool for engaging in natural conversation, are able to build rapport in a more subtle and conductive manner, and thus use their environmental surroundings more frequently for building natural rapport (Myklebust and Alison, 2000). In an environment that is often described as artificial and impersonal (Marsh et al., 2019), facility dogs were thought to not only provide interviewers with a topic of conversation that is more natural and relevant, but witnesses are also able to interact with them (e.g., stroking, cuddling, patting), providing a personal level of interaction during the interview process, which was perceived to create a safe environment for children to collect their thoughts and focus on the interview.

The view that facility dogs are a positive tool for building rapport are further supported by respondents' perceptions on the effectiveness of these dogs in enabling child witnesses to give evidence in a more credible manner. The most common responses from participants were that

they felt that the dogs' presence facilitated the witnesses' ability, and willingness, to communicate and positively alter their emotions, reducing fear and anxiety and increasing feelings of calm and confidence. Previous research has shown that when young witnesses are provided with comfort and emotional support, their negative responses, such as anxiety and stress, are mitigated, allowing them to communicate more effectively (O'Mahony et al., 2016; Victims' Commissioner, 2016). Reducing these negative emotions can also enhance their ability to function cognitively at an optimal level, as negative emotional states can divert attention and disorganise mental processes, impeding on the retrieval of information (Saywitz and Camparo, 2014).

It must be noted that, whilst infrequent, there was some disagreement relating to the use of facility dogs in interviews. In terms of the perceived impact on witness credibility, agreement was overwhelming as relating to witnesses being forthcoming, open, confident, and relaxed. A very small number of respondents (maximum 2) showed disagreement that facility dogs aided in witnesses communicating more logically, effectively, consistently and in providing a more complete account. Similarly, in relation to rapport building, respondents perceived facility dogs as enabling comfort, emotional wellbeing, better rapport, trust and likeability of the interviewer. Only between one and six respondents showed any disagreement of the benefits of using a facility dog for rapport building and this related to: better performance, cooperation, and staying committed to the goals of the interview. The disagreements point to items specifically targeting the effectiveness of disclosure itself which signifies that, unlike other services, there will be a minority of cases where a multitude of services are required and the use of a facility dog cannot be perceived as a 'one size fits all' solution. Still, these results, taken together, show overwhelming support in relation to creating a comfortable environment for witnesses and addressing their wellbeing.

Overall, the results clearly highlight the potential impact that facility dogs can have on rapport-building and achieving best evidence with child witnesses. These outcomes are not only supported by the literature discussed above, but they are also consistent with previous evidence on facility dogs, which highlights the vast impact these dogs can have on young witnesses (e.g., Bowers, 2013; Dellinger, 2009; Herzog, 2010; Holton, 2015). In the first research on bridging the justice gap for survivors of sexual offending, Spruin et al. (in press) found that the facility dog created a comforting environment, allowing survivors to focus on the interview and communicate more easily about their experiences. Likewise, Krause-Parello et al. (2018) compared two groups of children who had been referred for a forensic interview following allegations of sexual abuse. Children were randomly allocated to a forensic interview condition which either had or did not have a facility dog present during the interview. The study found that the facility dog had a stress reducing effect on children; therefore, those in the facility dog condition showed a significant decrease in stress after their forensic interview, compared to those children that did not have the dog present. Children in the facility dog condition also appeared more comfortable when disclosing details of the sexual abuse. As such, although building rapport and gathering reliable evidence is one of the most difficult tasks to achieve with young witnesses (Bretherton and Munholland, 2008; Milne and Bull, 1999), the use of a facility dog within this process could help to elicit evidence in a more effective and supportive way. The current study therefore adds to the perspectives of survivors by accounting for the practitioners' understanding of the impact of facility dogs. Being able to support findings centred around one topic from a variety of perspectives adds to the current agenda of utilising best available evidence, in addition to professional experience, enabling more evidence-based practice which can be supportive of policy changes (e.g. Lum; Koper, 2017; O'Neill, 2018).

The current study also provides insight into the potential impact that facility dogs could have on young witnesses going through the whole criminal justice process. For example, the qualitative responses further illustrated the positive impact that respondents felt these dogs had on the overall experiences of young witnesses, believing that they can positively alter the way witnesses and their families view and experience the criminal justice process. Children can experience considerable distress with the legal system (Plotnikoff and Woolfson, 2004, 2009) and this can potentially have a long-term negative consequence on them (Quas et al., 2005). Plotnikoff and Woolfson (2019) found that children have more positive experiences of the witness process when they are provided with specialised support, this can include any type of support that helps to mitigate negative emotional states. Based on the findings presented above, coupled with the research on the human-canine relationship, which has provided overwhelming evidence to the therapeutic support that dogs provide children (e.g., Coppinger; Coppinger, 2001; Daly and Morton, 2006; Hamama et al., 2011; Risle-Curtiss et al., 2013; Turner, 2007; Wells, 2009), facility dogs could potentially provide many witnesses with specialised support, helping to protect their emotional well-being.

Although the study provides a strong argument for the benefits that facility dogs could offer young witnesses, there are limitations to consider. Firstly, findings were gathered from the self-reported perceptions of legal professionals who had experience using facility dogs. The study did not directly assess the perceptions of young witnesses and the impact, if any, they felt these dogs may have on providing comfort and enabling them to provide a more complete testimony. As such, future research should look to integrate the personal experiences of these individuals, exploring not only their perceptions, but also assessing the quality of testimony when using a facility dog.

A second limitation of the study is that the results are based on the personal opinions of legal professionals who have used facility dogs, they may also be subject to potential bias. In particular, the results showed a significant ceiling effect for the quantitative data measuring witness credibility and rapport building. Previous studies have suggested that ceiling effects may be a common limitation for measures with positively framed questions, since it is difficult to distinguish across the high averages, thereby limiting the validity of the results obtained (Voutilainen et al., 2016). Although the current study took a mixed method approach to help counteract the ceiling effect of the quantitative measures, through gaining more meaningful explanations from respondents (e.g., Andrew et al., 2011), the ceiling effect seen in the study must be taken into consideration when interpreting the results. With that, the current study focused specifically on the use of facility dogs as a tool for building rapport and credibility, further research on the personal experiences of legal professionals utilising these dogs and the impact they have on these individuals, should also be explored in future research.

Lastly, as the practice of utilising facility dogs is primarily based in legal systems across North America, participants were only recruited from USA and Canada, and while human responses to trauma and guidelines on interviewing share commonalities, generalisability is inevitably limited to this specific sample and setting. Some cross-cultural validity was gained in this study as responses did not differ between the American and Canadian respondents despite different legal structures. Future research should therefore try and replicate the findings in other countries to increase their validity and generalisability.

To conclude, this study, through utilising a holistic mixed-method design, provides positive insight into the benefits that facility dogs can have during child witness interviewing, not only in helping build rapport and increasing witness credibility, but also in creating a more positive experience for young witnesses. These findings should be considered as a first step towards exploring the use of facility dogs in countries beyond North America, as they could provide an invaluable service to many witnesses going through the police interview process. Do to some of the inherited limitations discussed above however, more research needs to be conducted, to not only build on the current findings, but also to help explore the further benefits that facility dogs could provide, taking into consideration the personal experiences of all those involved.

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