November, 2015 **PILOT STUDY**



Child and Youth Mental Health & Addictions rogram Pet Therapy Pr

Background & Purpose

Animal Assisted Therapy (AAT) is "a goal-directed intervention in which an animal that meets specific criteria is an integral part of the treatment process. AAT is directed and/or delivered by a health/human service professional with specialized expertise and within the scope of practice of his/ her profession. Key features include specified goals and objectives for each individual and measured progress" (Kruger & Serpell, 2006, 23).

A 2015 systematic review of randomized control trials of AAT on psychosocial outcomes identified their benefit to a range of individuals, and the need for further research (Maujean, Pepping & Kendall, 2015).

This empirical fact sheet shares the history and findings of a pilot study of the Saskatoon Health Region, Child and Youth, Mental Health & Addictions Pet Therapy Program.

The goal of the Program is to improve the quality of life for children, youth and their families by incorporating animals into the therapeutic process. The objectives are to: (1) increase client skills and coping mechanisms, (2) enhance therapeutic alliance and client engagement, and (3) help attain clients' physical, social, cognitive and/or emotional goals in therapy.

As part of a multi-site project, the aim of this pilot study is to identify the outcomes/effects of the Program during the counselling session.

Drawing from the general animal assisted intervention literature, the near universal concepts of love and support are examined for if and how clients experience them, and key outcomes from past studies are measured (e.g., stress, anxiety, happiness, participation) as well. This study was not designed to specifically measure the objectives of the program, although insight into select goals is offered from the findings. Feedback is collected from both clients and therapists.

SHR Pet Therapy Program

The Saskatoon Health Region, Mental Health & Addictions Pet Therapy Program started in 2011 among a keen group of clinicians interested in the use of canines in therapy work with children (o-12yrs) and youth (13-18yrs). Prior to this, two clinicians were informally working with dogs in direct therapy.

Since 2011 the Pet Therapy Program has developed in various integrated ways: a Pet Therapy Committee was formed, knowledge on Ani-

mal-Assisted Therapy (AAT) and the Human-Animal bond has been gained, the program's goals & objectives have been defined in a logic model, policies, protocols and consent forms have been developed, sessions are being evaluated, a logo has been designed, and promotional items have been distributed. Presentations have been given at external agencies, in internal program areas, and at academic institutions. The Program has received positive support from management, colleagues and the families presenting for mental health services.

The Program is in the process of developing a Therapy Pet Intake Committee and training programing to establish a process for employees interested in pursuing AAT as a specialty in their practice.

There are currently 5 clinicians and therapy dog teams in the program and 4 teams participated in this study:

Worker	Position	Dog Name	Dog Breed	Dog Age	Dog Years Worked	Dog Work role	Dog Work schedule
B. Chappell	Support Project Case Manager	Diesel	Wheaton Terrier	6	1.5	One-on-one; School groups; In vehicle	3/month
S. Nadon	Psychologist	Max	Border Collie	12	2	Individual	1-2 days/week
K. Schwartz	Clinical Social Worker	Oden	Weimaraner	5	2	One-on-one; Group	1/week or 2/month
C. Petryk	Clinical Social Worker	Kona	Golden Retriever	4.5	2	Individual & Family therapy	2-3 days/week

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Research Methods

This pilot study was designed on a limited scale to gain insight into the session outcomes for the Program and to develop a future robust study.

The data collection was two-fold via a questionnaire. Qualitative, open-ended inquiry documented participant and handlers' subjective experiences, meanings and processes (Denzin & Lincoln, 2008). This approach recognizes that others' perspectives lend to the co-creation of individuals' stories such that they can collaboratively unfold (i.e., clients and handlers) (Creswell, 2013). Quantitative, Likert scales documented outcomes in areas identified from the literature.

The data was collected from September to December, 2014. A total of 40 client encounters were analyzed, with 40 client and 41 staff questionnaires completed (2 staff may attend the same session). Four of the five Therapy Dogs were involved in the data collection with 30 individual clients: Kona (15 sessions), Max (10), Oden (7), Diesel (6) & unknown (2). Clients visited with the dog between one and 21 times prior, with an average of 5 visits. Sixty-five percent reported a pet in the home, 86% dog and 14% cat.

Partnership & Ethics

This pilot study was initiated through a Project Collaboration Agreement between the Saskatoon Health Region (SHR) Pet Therapy Program & the Research Chair in Substance Abuse at the University of Saskatchewan. The aim was to commit to a community-based research partnership that began to establish an evaluation of the Pet Therapy Program. This included the Research Chair providing guidance to the Program through *First Steps First: A Com*-

Becoming a Therapy Dog

There are many considerations to becoming a Therapy Dog doing AAT. Dogs are assessed in terms of temperament and obedience, and as well must pass a general health screen. The dog handler is an employee and human service professional whose position would benefit from this specialty. Dogs are not considered for testing prior to 1-2 years of age. The clients were presented with a questionnaire at the completion of each session, and filled it in on-site and out of the presence of staff. Parents/guardians helped clients complete it as needed. Staff completed questionnaires immediately after the session.

The client demographics are:

Gender	Male	22	55%
	Female	18	45%
Ethnicity	Aboriginal	8	20%
	Asian	1	3%
	Caucasian	31	76%
Age	0-12	30	75%
	13-18	5	13%

The staff demographics are:

Education	BSW	2	40%
	MSW	2	40%
	PhD Psychology	1	20%
Years in field	Average 15 years		
Years in SHR Mental Health & Addictions	Average 11 years		

munity-Based Workbook for Evaluating Substance Abuse & Mental Health Programs in Saskatchewan (Daschuk, Dell & Duncan, 2012).

The Saskatoon Health Region provided operational approval for the study, ethics exemption was granted from the University of Saskatchewan Human Research Ethics Board given the project's evaluative focus, and an ethics certificate was granted from the U of S Animal Research Ethics Board and adhered to the Canadian

> Council on Animal Care guidelines for humane animal use.

All therapy dogs working in the SHR Mental Health and Addiction Services are approved by the Pet Therapy Program's Animal Assisted Therapy Consultant (Certified Dog Trainer).

Once approved for therapy suitability, the dogs are required to wear designated identification vests or bandanas and photo I.D. name tags. Dog handlers are

Data Analysis

The data collected using the Likert scale were analyzed quantitatively for descriptive statistics (i.e., mean and frequency). Means and frequencies were compared to provide an indication of highest means and largest proportion of agreement on items. T-test mean comparisons were conducted on how a client felt before and after spending time with the Therapy Dog.

The qualitative data was analyzed through an inductive thematic analysis. Such an analysis seeks to identify recurrent patterns, or themes, in textual data. These themes were compared with others and clustered based on similarity in meaning (Saldana, 2010). The frequencies presented here may not sum to the sample size because sentences can be thematically coded more than once. All data was reviewed and interpreted by our multi-disciplinary team.



Animal Assisted Interventions (AAI) is the umbrella term used to describe the many ways animals are included in peoples' care. The AAI program in this Fact Sheet *cannot* be directly compared to others in the series as they vary in client presenting needs, therapeutic approaches and species (e.g., horses are prey animals and dogs are predator animals).

responsible for ensuring the health, safety and wellbeing of the Therapy Dog. At no time do Therapy Dogs interact with clients without their handler present and the Therapy Dogs are kept on a leash at all times. The Pet Therapy Program adheres to the SHR Infection Prevention and Control Policy (SO-30).

Findings

Client: Rated Items

The 40 clients were asked to rate nine items using a 5-point Likert scale ('Not at all' to 'Yes, a lot' OR Smiley/Sad Faces).

In response to whether they liked spending time with the Therapy Dog, 93% of clients responded 'Yes, a lot' with an overall average of 4.93 (boys 4.95 & girls 4.89).

Clients positively and strongly rated how they felt in time they spent with the Therapy Dog.

1='Not at all' and 5='Yes, a lot'	Boys Average	Girls Average	All Average
Comfy around dog	4.86	4.78	4.83
Dog loves me	4.45	4.78	4.60
Dog handler was nice to me	5.00	5.00	5.00

After the clients' visit with the Therapy Dog, they rated their feelings very positively, with the most prominent being feeling calm.

1='Not at all' and 5='Yes, a lot'	Boys Average	Girls Average	All Average
Feeling anxious	1.41	1.72	1.55
Feeling calm	4.64	4.56	4.60
Better able to control how I feel (emotions)	4.18	4.17	4.18
Unhappy	1.50	1.33	1.43

On average clients rated their feeling one face higher after spending time with the dog (3.80 to 4.55, significant at p < 05). Girls reported greater range of change in how they felt.

1='Very Sad Face' and 5='Very Happy Face'				
	Boys	Girls	All	
How felt before with dog	3.91	3.67	3.80	
How felt after with dog	4.41	4.72	4.55	

Client: Qualitative

Question: Why did you like spending time with the Therapy Dog today? Who responded: 31 of 40 (78%) Themed frequency: Like dogs/friendly/fluffy/nice (39%) Playful/tricks/fun (32%) Feel better/calms/cheers me up (26%) Love dogs/listens to me/feel attuned (23%) Unsure (6%)



The only difference in all of the categorized responses by gender was that more females (46%) than males (11%) reported 'feel bet-ter/calms/cheers me up'.

Question: How did spending time with the Therapy Dog make you feel? Who responded: 36 of 40 (90%) Themed frequency: Happy/really liked/awesome (78%) Good/better (25%) Calm/relax/safe (19%)

The only difference in all of the categorized responses by gender was that more females (43%) than males (14%) reported 'good/ better'.

Question: Other comments **Who responded:** 11 of 40 (28%) **Themed frequency:**

Like time with the dog (55%) Will miss the dog/sad to leave (45%) Liked to feed the dog treats (18%)

Staff: Rated Items

The 41 staff observations included rating their client during the session on six items using a 5-point Likert scale (Strongly Disagree, Disagree, Unsure, Agree, Strongly Agree).

On average, the staffs' strongest agreement was that the clients' showed positive affect (average =4.73), with 77% strongly agreeing.

5= 'Strongly Agree' Client	Average Rating
Talked more openly	4.54
Increased participation in activities	4.59
Showed more positive affect (e.g., smiled more)	4.73
Seemed less agitated	4.37
Seemed more relaxed	4.61
Showed increased compli- ance during the session	4.46

Staff: Qualitative

Question: Why did you use the Therapy Dog today? Who responded: All 41 (100%) Themed frequency: To teach regulation/psychology education/ social skills (71%) Comfort/relaxing/decrease anxiety(49%) Increase engagement (25%)

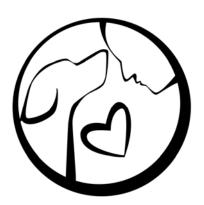


Question: Observations of the client feeling supported and loved by the Therapy Dog

Who responded: 30 of 41 (73%) Themed frequency:

Emotional affection/loves/hugs (61%) Engagement/talked more/interaction with dog (39%) Physical affection/laid beside/clean paws (32%) Happy/smiles (26%) Improved self esteem/self confidence (23%), No improvement (6%)

There were no differences noted in the limited ethnicity data, as well as no differences by age, but again noting the limitations of the data sample size. For clients that are 12 and older there were also no notable differences identified in comparison to their younger counterparts.



Discussion

The outcomes/effects of the Pet Therapy Program during the counselling session are discussed within the three objectives of the program and the additional area of love and support.

Overall, the vast majority of clients greatly enjoyed the time they spent with the Therapy Dog and felt better because of it, with boys' ratings showing slightly higher enjoyment and girls indicating greater change in their feelings over the course of the session.

Support for each of the Program's objectives was identified, as follows:

GOAL 1: Increase client skills and coping mechanisms

Clients

The clients rated their feelings after visiting with the dog very high, including increased calmness and control over their emotions. Girls rated their initial level of anxiety somewhat higher than boys. The clients overwhelmingly shared that the dogs made them feel happy, accepted and safe. They really enjoyed interacting with the dog.

"I felt better and happy and excited"

<u>Staff</u>

The staff most strongly agreed that the client showed positive affect (e.g., smiled) in the session with the Therapy Dog present. They likewise positively rated their clients' level of relaxation with the dog.

"Smiled when petting therapy dog; smiles when walking/taking leash off pet therapy dog"

This finding suggests that incorporating the Therapy Dog into the counselling session helps to create a comfortable setting that may have a calming effect for clients. The literature supports that the integration of an animal into therapy promotes a nurturing and safe environment for clients (Chandler, 2012; Fine & Beck, 2010). Further, it specifically shares that an animal can instill relief from stress (Allen, Blascovich, & Mendes, 2002). Arkow (2011) refers to therapy dogs as "a form of stress-reducing or stress-buffering social support" (p.2). Physiological changes in humans can also occur, including lowered blood pressure, heart rate, levels of cholesterol and triglycerides, and increased dopamine production which reduces the stress hormone cortisol (Kruger & Serpel, 2010 as cited in Arkow 2011; Wilson 1987). With the Therapy Dog creating a safe space for conversation, clients are more open, willing and motivated to learn and practice effective skills and strategies (Chandler et al. 2010; Trivedi & Perl, 1995).

GOAL 2: Enhance therapeutic alliance and client engagement

<u>Client</u>

The clients very much experienced positive feelings in the session, including comfort, love from the dog, and a nice (i.e., friendly) handler/therapist. The rating for comfort was slightly higher for boys and slightly higher for girls for feeling the dog loves them.

The clients' most common reason for liking the time they spent with the Therapy Dog was that they liked dogs, followed by the dogs being fun, the dog helps them feel good, and they can connect with the dog.

"Because its good to have something to pet and play with when you're down, and when you do not have a pet "

<u>Staff</u>

On a practice level, the staff strongly agreed that the clients talked more openly, had increased participation in activities, and showed increased compliance during the session. They also shared that they used the Therapy Dog in the session that day because it provided comfort and increased engagement.

"The client often hugged and petted the dog. He smiled more and talked more openly"

This finding demonstrates that the Therapy Dog assists the client to engage in therapy, thereby increasing the therapeutic alliance. An animal may appear less threatening than a human (Fine & Beck, 2010). In turn, the relationship or bond formed between the client and the dog may extend to increased trust and alliance with the therapist. One of the only studies evaluating the effect of AAT on therapeutic alliance was in adult, group therapy and it was found that the presence of a dog enhanced it (Wesley, Minatrea & Watson, 2009).

Goal 3: Help attain client' physical, social, cognitive and/or emotional goals in therapy.

<u>Staff</u>

Staff reported that they most commonly incorporated a Therapy Dog into a session in order to teach specific social skills and emotional regulation strategies as part of the goals for their clients. A systematic review of AAT studies found that it had impact in several areas, including medical difficulties, behavior problems and emotional well-being (Nimer & Lundahl, 2007).

ADDITIONAL: If and how clients experienced love and support from the Therapy Dog in the session (& support from the handler)

<u>Client</u>

Clients rated 'the dog loves me' an average of 4.6/5 and shared comments like "only dog *lve* seen that listens to me".

The clients also rated that they felt 'comfy around the dog', measured in this study as support, on average 4.6/5. An example of a comment is "because she calms me, shows me tricks". And all clients shared that the dog handler was nice to them, measured as support.

<u>Staff</u>

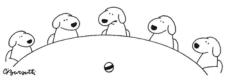
The staff shared that the therapy dog offered their clients emotional affection, including a sense of being loved. The dog also offered physical affection, by providing opportunities to lay bedside the dog, groom it, and hug or pet it. Support was interpreted as the therapy dog providing a comforting and nonjudgmental presence for the clients to talk and engage readily in the session. Two staff shared:

"This client was referred to me for AAT as she would not engage with person therapist. She has fully engaged with me and I believe it was because of the dog"

"Client overtly enjoyed physical attention and affection from therapy dog".

The literature identifies dogs' innate ability to offer and receive nurturance (Chandler, 2012; Levinson, 1984; Melson & Fine, 2010). Therapy Dogs present with non-judgmental warmth, companionship and bonding, which in turn nurtures the ability of humans to love and trust (Arkow, 2011). In fact, it has been reported that interacting with dogs can, for some, parallel the social support experienced in human-human relationships (Fine & Beck, 2010). Animals can trigger happy memories, improve mood, and bring a sense of happiness, joy and a general sense of wellbeing to individuals (Arkow, 2011). Perceived shifts in participants' feelings and mood may also be influenced by beneficial hormones and neurochemicals that are released when petting an animal, including oxytocin, prolactin, dopamine, beta endorphins and phenylethyalamine (Odendaal & Lehmann, 2000).

The handlers' offering of support alongside the therapy animals has only recently been acknowledged in the literature (Adams, et al., 2015). There is, for example, evidence that the presence of a dog in a counselling session can facilitate a client's communication and feelings of comfort. Wesley, Minatrea, and Watson (2009) found in their study of an adult residential substance abuse program that clients were more likely to open up in the presence of a dog about their histories of violence and trauma. We have seen glimpses of this as well in the work of Hodgson and Darling (2011) on the physician pet query, in which a primary care provider can more fully determine their patients' environmental history and social context by asking about pets.



"Perhaps we're overthinking the situation."

Practice & Research Recommendations

- The initial data will assist the Pet Therapy Program to begin a process of determining which clients/client families would benefit from AAT.
- ✤ In time and with additional Therapy Dogs approved for AAT, the Program will be able to explore the benefits of matching personalities/ temperaments of the Therapy Dogs with clients' presenting issues. For example, a Therapy Dog with a calm temperament may be more suitable/effective for children presenting with anxiety, whereas as energetic dog may be helpful with children who also have high activity levels and impulsivity.
- Explore expanding the role of the Therapy Dog by including them in group work (e.g., Children's anxiety group).
- Undertake future research with an expanded sample size and ideally a randomized control group.
- Explore whether the therapeutic alliance is expedited with a therapist when a Therapy Dog is incorporated.
- Explore whether the Therapy Dog is a motivator for program attendance among children and youth.
- Explore whether there are any impacts for the parents/guardians when they are in their child's session. Also explore any impact of the Therapy Dog on the parent-child interactions and/or family dynamics?
- Explore whether clients are more readily transferring the skills learned during a counselling session involving a Therapy Dog to generalized situations.

PILOT STUDY CONCLUSION

The outcomes/effects of the Pet Therapy Program support its three objectives, in addition to providing clients with love and support, and this should be fully explored in a future, robust study.

This Fact Sheet is one in a series. The findings of the Fact Sheets cannot be directly compared to one another because the AAI programs vary in clients, approaches and species.

Visit our website:

www.tinyurl/aat-addiction

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Acknowledgements

This project was funded by the Canadian Institutes of Health Research, Institute of Neurosciences, Metal Health & Addiction,

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Thank you to all who participated—clients, staff and the Therapy Dogs.

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