

THE IMPACT OF THE STORY DOGS READING PROGRAM ON STUDENTS WELLBEING: REPORT FOR STORY DOGS

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ACKNOWLEDGMENTS

Story Dogs and Monash University would like to acknowledge and thank the participants in this study, the children, teachers, parents, handlers, and dogs. The researchers would like to acknowledge the financial support of Monash University for the preparation of this report.

EXECUTIVE SUMMARY

This study was a partnership between Monash University and Story Dogs, a volunteer, non-profit, dog-assisted reading program (Story Dogs, 2009). Established in 2009, Story Dogs aims to create a relaxed and safe environment for children to extend their reading capabilities, by reading to Story Dogs and their handlers. Both dog and handler undertake rigorous training and checks before commencing work within schools. Identified students attend 20-minute one-on-one reading sessions with the therapy dog and their handler once per week, with books chosen to reflect the child's reading level and interest.

Recently, there has been an increasing interest in the use of therapy dogs in school settings, and in Animal Assisted Interventions to support wellbeing. Whilst there are various definitions of wellbeing, they all incorporate positive emotions, relationships, and environments. Research indicates a link between children's wellbeing and school experiences, including student's learning, attendance, and behaviour (Australian Government Department of Education, 2018). Numerous studies have documented positive gains for individuals in the presence of therapy dogs (c.f. Beetz & McCardle [2017], Connell, Tepper, Landry, & Bennett [2019], and Jalongo & Petro [2018], and Morgan [2008]). Yet, the perspectives of key stakeholders is often overlooked within the literature on the use of therapy dogs to promote students wellbeing. This study aims to fill this gap, by exploring the perspectives of students, teachers, parents, and Story Dog handlers participating in the Story Dogs program.

This study employed a mixed methods exploratory design to investigate the impact of Story Dogs on the wellbeing of children participating in the program, and to identify areas of consideration for the ongoing success of the program. It encompassed the perspectives of six Story Dog handlers, eight teachers, eleven Grade 1 and 2 students, and eight parents. Participating schools were located in the Bayside Southern Area of Melbourne, Australia. Ethics approval for this study was obtained from Monash Universities Human Research Ethics Committee (project number: 16398), and the Department of Education, (project number: 2018_003878).

Data collection occurred at two time points, weeks 12 and 20 (May and July 2019) of the school year. Semi-structured interviews were conducted individually with all parties, both via telephone and in person. Duration of interviews ranged from four to 75 minutes, depending on participant input. Interview data was analysed via Braun and Clarke's (2006) thematic analysis, with themes substantiated through 'negotiated agreement' (Garrison, Cleveland-Innes, Koole, and Kappelman, 2006). Teachers, parents, and students also completed quantitative questionnaires at both data collection time points. Teachers completed the Strengths and Difficulties Questionnaire (SDQ) Teacher version and the Positive and Negative Affect Schedule for Children (PANAS C-P) via Qualtrics, an online survey distributor. Parents completed the parent versions of the SDQ and the PANAS C-P, also via Qualtrics. Pre-and post group means were compared for both groups during analysis. Students completed four questionnaires, the PANAS – C (child version), the Children's Hope Scale (CHS) (Snyder et al., 1997), the Multi-Dimensional Student Life Satisfaction Scale (MSLSS) (Huebner, 1994), and the Intrinsic Motivation Inventory – Reading (IMI – R) (Fulmer & Frijters (2011)). All tests were administered verbally. The Wilcoxon signed-rank test (Rey & Neuhauser, 2011) was used to identify any significant median difference across each matched sample from the four questionnaires administered at both time points.

The quantitative results suggest no significant differences in the wellbeing of children participating in the program from weeks 12-20 on any of the domains measured. This was an unexpected finding, as the positive effects of therapy dogs on mood (Kaminski, Pellino & Wish, 2002), anxiety (Morgan, 2008), and prosocial behaviour (Byström & Persson, 2015) is well documented. Methodological challenges may have limited the conclusions drawn from the quantitative results. Findings from the qualitative results suggest the program is having a positive impact on student well-being. Semi-structured interviews provide key stakeholders perspectives on the impact of Story Dogs on participating children's wellbeing. Multiple themes and subthemes were identified for each cohort. Recurrent themes across cohorts centred on

the safe learning environment Story Dogs provides, the emotional support provided, and reading related developments, including re-engagement, and pro-social behaviours. This has important implications for children's wellbeing and learning.

Handlers considered dog education as the central strength of the program, where children learnt how to interact safely and responsibly with dogs and in turn become comfortable reading to the dog. At times, the timing of sessions and activities presented as barriers to the program. Therefore, it is recommended that Story Dogs include the voice of each participating student and teacher when planning, monitoring, and executing sessions. Some parents expressed a desire for greater information on the program, including its evidence-base and goals. It is recommended that Story Dogs extend their parent information package to include these elements. Handlers noted that teachers often lacked awareness of the program, although provided with adequate materials. Time constraints for teachers presented as a central factor effecting success of Story Dogs. The excessive workload of teachers is well documented in the literature (Buchanan et al., 2013; Laming & Horne, 2013). Therefore, it is recommended that teachers be provided with information on the program in a concise and easily assessable format, and/or in multiple formats. This must include information on the program that is relevant to teachers in terms of the program's evidence-base for supporting the wellbeing of children when reading to a Story Dog.

BACKGROUND OF THE STUDY

The present study was conducted in partnership between Monash University and Story Dogs, a volunteer, Australian, non-profit, dog-assisted reading organisation, established in 2009 (Story Dogs, 2009). Prior to this study, the chief investigators, Dr Linda Henderson and Dr Christine Grove, published an article in the Australian media outlet, 'The Conversation' in March 2018. The article explored the impact of therapy dogs in education settings. Story Dog co-founder, Janine Sigley, approached the chief investigators to express her interest in participating in research on the use of Story Dogs in school settings. The purpose of Story Dogs is to create a relaxed and safe environment for children to further extend their reading abilities. It is based on the premise that Story Dogs can ease students' reading fears via their non-judgemental and calming nature. The team is comprised of volunteer handlers and their dogs. Dogs and handlers in the Story Dogs team are trained by the organisation (Story Dogs, 2018). A certified dog trainer assesses the dogs' behavior and temperament in a variety of situations before accreditation is passed. Story Dogs must also be vaccinated and wormed and have successfully completed an annual health check with a veterinarian. Volunteers are required to pass background checks before working in schools. This includes a Working with Children Check. Handlers receive approximately eight hours of training. Handlers learn the necessary skills to undertake weekly reading sessions with children at their schools, and ways to incorporate the Story Dog into these sessions. Handlers are also provided with the opportunity to observe experienced handlers and their Story Dog conduct a reading session in a school setting. Story Dogs currently service 307 schools across Australia, with over 2 490 children reading each week with the Story Dogs team (Story Dog, n.d.).

The Story Dog and handler team visit schools once a week to work with students identified by teachers as most likely to benefit from an individual reading session. Children read one-on-one to the dog and their handler during 20 minute sessions in a quiet area of the school. The handler provides a selection of books for the child to choose from. This selection is based on the interests of each individual child and their reading level. During sessions, the handler may listen to the child read to the Story Dog and provide prompts by speaking through the dog. This study explored the impact of Story Dogs on the wellbeing of children from the perspective of the handlers, teachers, students, and parents involved in the program. Each perspective was studied and documented within separate theses, by students at Monash University in Melbourne, Australia. Three comprised a Masters of Educational and Developmental Psychology, and one a Graduate Diploma of Professional Psychology. This report is a comprehensive synthesis of the four theses.

LITERATURE REVIEW

CONCEPTUALISING WELLBEING

The past few decades has seen a shift in the field of mental health, from a focus on negative symptomatology and diagnosis of mental illness, toward exploring means for fostering positive mental health (Beyond Blue, 2019; Brown, Lomas, & Eiroa-Orosa, 2018; Greenspoon & Saklofske, 2001; Manderscheid et al., 2010). This shift has resulted in the emergence of the term, 'wellbeing'. Whilst adoption of this term has gained traction, the construct of wellbeing remains difficult to define and measure (Bache & Scott, 2018; Kozina & Štraus, 2017). Hence, multiple measures, definitions, and models of wellbeing exist within the literature. Among these are Seligman's (2011) PERMA model, and the Subjective Wellbeing (SWB) model (Diener, 1984). PERMA consists of five elements of wellbeing: Positive emotions, Engagement, Relationships, Meaning, and Accomplishment. The Subjective Wellbeing (SWB) model defines wellbeing within three parts: satisfaction with life, presence of positive affect, and absence of negative affect (Diener, Emmons, Larsen, & Griffin, 1985). A consistent thread across these wellbeing models and others is a focus on positive emotions, relationships, and environments (Trainer, 2019).

CHILDHOOD AND ADOLESCENT WELLBEING

The prevalence of young people experiencing mental illness is currently on the rise (World Health Organisation [WHO], 2018). Recent figures reveal 560 000 young Australians have a mental illness (Mission Australia, 2017), with suicide rates accounting for one third of deaths for Australians aged 15-24 (Black Dog Institute, 2016). Research has uncovered a range of social, economic, and biological factors accounting for this increase in mental illness among young populations, and the long-term effects of negative childhood wellbeing (Schema, 2019). Consequentially, fostering children's wellbeing is becoming increasingly significant as a protective factor. Research has uncovered a strong link between children's wellbeing and school experiences, including student's learning, attendance, and behaviour (Australian Government Department of Education, 2018), with a surge in literature combining these concepts of wellbeing and learning. The Australian Government has responded to this movement through numerous national mental health initiatives, including school based programs.

WELLBEING IN THE SCHOOL ENVIRONMENT

The Melbourne Declaration of Educational Goals for Young Australians brought forth mandated explicit teaching of strategies to improve and promote student wellbeing, through the development of the 'Personal and Social Capability' of the Australian Curriculum (Barr et al., 2008). Since then, the Australian Student Wellbeing Framework was launched in 2018 (DET, 2018). It provides five evidence-based mechanisms to improve and promote wellbeing. Accompanying resources and websites provide support for educators, parents, and students in applying each mechanism. Whole school wellbeing initiatives have included the KidsMatter, MindMatters, and Resilience, Rights, and Respectful Relationships Framework, each sharing a key focus on the promotion of positive student wellbeing from a whole school approach (Goldberg et al., 2018).

THERAPY DOGS

There is currently increasing interest in Animal Assisted Interventions to support wellbeing. Therapy dogs are one such avenue that have been adopted within school settings, due to their domestication, availability, and trainability (Nimer & Lundahl, 2007). These animals are used with a variety of individuals, and may be of particular benefit to children with

heightened anxiety, and those who are socially unresponsive, shy, or withdrawn (Friesen, 2010). Selected for their placid temperament, the dogs undergo extensive training to ensure consistent non-aggressive, calm, and obedient behaviour (Jalongo & Petro, 2018), with the aim of providing comfort to those who may be enduring stress (Walsh & Mertin, 1994). Presenting issues surrounding sanitation, allergies, and phobias of dogs are readily addressed with the appropriate personnel prior to the intervention (Jalongo, 2018). Numerous studies have documented positive gains for individuals in the presence of therapy dogs, including increased social behaviours (Stevenson, Scott, Hinchcliffe, & Roberts, 2015), increased competence and mental health functioning (Stefanini et. al., 2016), reduced anxiety (Morgan, 2008), and depressive symptoms (Souter & Miller, 2007), decreased physical reactions to stress (Beetz & McCardle, 2017; Jalongo & Petro, 2018), and increased reading capabilities (Connell, Tepper, Landry, & Bennett, 2019).

The use of therapy dogs for improved literacy in school settings is gaining popularity. In 1999, the R.E.A.D (Reading Education Assistance Dogs) program was launched in the USA, on the premise that therapy dogs would increase reading competence through reducing student's levels of stress (R.E.A.D. Dogs Minnesota, n.d.). Story Dogs, founded by Leah Sheldon and Janine Sigley, was modelled off this program (Story Dogs, 2009).

THE PRESENT STUDY

Students, teachers, parents, and handler's perspectives are often overlooked within the literature on the use of therapy dogs to promote student wellbeing. This study aims to fill this gap, by providing an overview of these key stakeholder perspectives.

The aims of the study are:

- 1) To explore the impact of Story Dogs on the wellbeing of children involved in the dog-assisted reading program, Story Dogs, as reported by the handlers, teachers, students, and parents, and
- 2) To understand the barriers and facilitators for the ongoing success of the Story Dog dog-assisted reading program, from the perspective of the handlers, teachers, students, and parents.

METHODOLOGY AND METHOD

PARTICIPANTS

Six volunteer handlers, eight teachers, eleven children, and eight parents participated in this study. The recruitment of all participants occurred during February to May 2019, via liaison with the Managing Director/Co-Founder of Story Dogs, Janine Sigley. Janine provided the research team with local coordinators of the Story Dogs program in the Bayside Southeast area of Melbourne. The coordinators provided the researchers with contact details of principals within each school. Information on the project was emailed to school principals. Further information was provided during meetings at the schools, phone calls, and follow up emails. Schools who agreed to participate were sent explanatory statements and consent forms to parents of children participating in the Story Dogs program within their school. Explanatory statements and consent forms are provided in Appendix A. Children's assent was obtained at each data collection point.

Participating volunteer handlers were aged between 55 and 77 years, with the mean age being 66 years. Participant's volunteer experience at Story Dogs ranged from 1.5 to 9 years, with the mean of 3.25 years.

Four schools operating Story Dogs in Victoria were invited to participate in the study. To be eligible, teachers had to have experience with the program, and currently have students involved in the program. All teachers were female, teaching grade one or two, at a school in the Bayside and Mornington Peninsula region. Nine boys and two girls from grades one and two participated in the study. The children were aged between seven and eight years of age. All children were already participating in the Story Dogs program. At the time of recruitment, all children had previously attended a minimum of 12 weekly sessions and were continuing the program. Teachers had identified the majority of children as reading below expected levels and/or lacking confidence in reading. Student's demographic information is outlined in Table 1.

Eight parents, seven female and one male, participated in the study. Of these, six females and one male completed the semi-structured interview. Parents resided in the Bayside region of Melbourne, Victoria. One parent had recently migrated to Australia from New Zealand at the beginning of 2019. Pseudonyms have been used for the names of all participants in the study. Students chose their own pseudonyms.

Table 1

SUMMARY OF PARTICIPATING STUDENT'S INFORMATION

Pseudonym	Gender	Grade/Age	Reason for selection into the Story Dogs program
Marshadow	Male	1 (7)	Reading below expected levels, low confidence
Loki	Male	1 (7)	Reading below expected levels, low confidence
Zeppy	Male	1 (7)	Reading below expected levels, low confidence
Tony	Male	2 (8)	Reading below expected levels, loves animals
Benjamin	Male	2 (8)	Reading below expected levels, quiet personality

Chocolate	Male	2 (8)	Reading below expected levels, may enjoy individual reading time
Pineapple	Male	2 (8)	New student since the beginning of year, struggles with resilience
Minimoo	Female	2 (8)	Reading below expected levels, low confidence, loves animals
Poppy	Female	2 (8)	Reading below expected levels
Jeff	Male	2 (8)	Reading below expected levels
Snowy	Male	2 (8)	Reading below expected levels, some behavioural difficulties

Taken from Wanxing (2019)

RESEARCH DESIGN

A mixed-methods design using quantitative and qualitative methods was employed. Pre-and post-implementation, students, teachers, and parents completed a wellbeing questionnaire, comprising the quantitative component. Semi-structured interviews with participants comprised the qualitative component. Using a mixed method approach provided different, yet complementary perspectives on the impact of Story Dogs on children's wellbeing.

PROCEDURE

Ethics approval for this study was obtained from Monash Universities Human Research Ethics Committee (project number: 16398), and the Department of Education, (project number: 2018_003878) (see Appendix B).

Data collection occurred across two points 8-10 weeks apart; Phase 1 took place in May 2019, Phase 2 took place in July and early August 2019. All interviews were recorded, transcribed, and stored in a secure location by the researchers, with participant consent. Interview schedules are presented in Appendix C. Following is the data collection and analysis procedures for each cohort:

- Handlers: Data was only collected at Phase 2. Semi-structured interviews were conducted via telephone. Interviews were between 25-75 minutes in duration.
- Teachers: Qualtrics, an online survey tool, was used to gather data at both time points. Teachers completed the Strengths and Difficulties Questionnaire (SDQ) Teacher version and the Positive and Negative Affect Schedule for Children (PANAS C-P). The SDQ assesses student's overall mental health and wellbeing, including emotions, peer relationships, and pro-social behaviour. The PANAS C-P is traditionally a parent-report measure. This tool was adapted for use with teachers. It assesses the student's positive and negative affect. Due to sparse responses, pre-and post-group means were compared for both assessment tools during analysis. Of the initial eight teachers participating in the study, six elected to take part in semi-structured interviews during Phase 2 of the data collection. Interviews were via phone. Interviews were 10-20 minutes in duration.
- Parents: Parents completed the SDQ (parent version) and the PANAS C-P online via Qualtrics at both data collection time points. Two participants had data missing on all items, and were therefore removed from the data set. This left a total of six parents remaining in the quantitative data set. This data set was analysed via pre-and post-group means comparison, due to participant's inconsistent

logging in with usernames. Phone interviews were conducted with parents during Phase 2 of the data collection. Interviews were between four to 15 minutes in duration.

- Students: Children completed four questionnaires at both time points; the PANAS – C (child version), the Children’s Hope Scale (CHS) (Snyder et al., 1997), the Multi-Dimensional Student Life Satisfaction Scale (MSLSS) (Huebner, 1994), and the Intrinsic Motivation Inventory – Reading (IMI – R) (Fulmer & Frijters (2011). All tests were administered verbally, with children being presented with different size circles representing the degree of feeling they had toward their response (e.g. a small circle represented feeling the response ‘very slightly’, a large circle represented feeling the response ‘extremely’). Children were instructed to point to which circle best represented the magnitude with which they agreed to the statement. The PANAS – C shortened version was adapted for use in this study. The CHS measures pathways and agency thinking in children. The MSLSS provides a profile of life satisfaction across the domains of family, friends, school, self, and living environment. For the purpose of this study, the living environment section was excluded from the test. The IMI – R measures interest/enjoyment, self-perceived competence, and perceived effort. An additional scale measuring the value of reading was included for the purpose of this study. The Wilcoxon signed-rank test (Rey & Neuhauser, 2011) was used to identify any significant median difference across each matched sample from the four questionnaires administered at both time points. Semi-structured interviews were conducted during Phase 2, with each lasting between 10-20 minutes in duration.

All interview data was analysed via Braun and Clarke’s (2006) thematic analysis. Themes were substantiated through ‘negotiated agreement’, as outlined by Garrison, Cleveland-Innes, Koole, and Kappelman (2006).

FINDINGS

This section will outline the findings in relation to each cohort.

HANDLERS

Four themes were identified in relation to the impact of Story Dogs on children's perceived well-being: Judgement Free Zone, Emotional Catharsis, Re-engaging the Disengaged, and Ripple Effect (including Target Students, Non-Target Students, and Entire School Community).

Judgement Free Zone: The presence of dogs facilitated a judgement free learning zone for both the student and their reading, promoting feelings of optimism and calm. Handlers stated, "The child isn't judged; the child just reads to the dog. And if they make a mistake, so what? The dog doesn't judge them, so they feel comfortable" (Handler 4), and "Dogs are completely non-judgemental; they don't care what you look like, they don't care about how much make up you're wearing or if you're pretty...they love you unconditionally, and they don't judge you at all" (Handler 1), and "[The students] come in feeling all sorts of emotions because they may already feel that they have failed in their reading, but when they have a big goofy dog...that they may connect with...then straight away the emotional impact on them is huge in terms of...that feeling of security, that feeling of connectedness, that feeling of trust, that feeling that they belong" (Handler 2).

Emotional catharsis: Handlers perceived the Story Dogs program to provide a platform for children to share their emotional state, worries, and concerns, stating, "They do tell us quite a lot about their family situation... because their guard is down, and they feel relaxed" (Handler 3), and "The children know, that when they come and see me and [my dog]...there is a total absence of judgement... and you do find because of that, they tell you quite a lot..." (Handler 1), and "Another little girl I'd seen a couple of times last year ... I saw her in the corridor this year, and she made a B-line straight for me and said, "I'm not going to be here tomorrow...I have to go to Port Augusta-which is 75km away-to have my eyes tested...". For her, it was important to connect with the Story Dogs context about something that was important to her." (Handler 2)

Re-engaging the disengaged: Handlers felt that the children enrolled in the Story Dogs program were often competent readers, but disengaged and disruptive students. Story Dogs was perceived as an avenue to provide one-on-one emotional and reading support for these students, assisting them to re-engage with their learning in a safe environment. "One little girl in year two, she was a great reader...but she was seven and the eldest of four children, and [her] mum was really struggling ...The teacher said she was really an 'A/B' student, but she was only a 'C/D' student because she was never [at school].... So, for her, just to have that 20 minutes with the dog ...being quiet and reading on her own...was just the best thing about it for her" (Handler 1). "[One boy] was completely disengaged, and the school had tried lots of things to get him back on track ... For him to be able to chat to somebody...the school said it really made a difference to him. So yes, it's a literacy program, and yes, it's about making reading fun, but it's so much more than that as well" (Handler 1).

Ripple effect: Handlers perceived the dog's presence as having a "ripple effect", where the social benefits extended firstly to the child enrolled in the Story Dogs program, then to other students not enrolled, and lastly to the broader school community:

Target students: The dog's presence was seen to facilitate conversation and connection, providing a social lubricant between handler and child. "I've developed these really beautiful relationships with the kids and that was such a surprise element to me...to have these relationships through [the dog], he's been the instigator that's driven it" (Handler 6). "Usually I say, "This is Alfie. Would you like to sit with him?" So, the focus is on the dog, and that really breaks the ice somehow" (Handler 1).

Non-target students: The dog's presence encouraged social interactions for students who were not directly involved in the program, but who attended the school. "I always go in about 15 minutes early...he's just part of that little school. They all love him and as soon as I get in the front gate, they all run up to me. ... all the grades, not just the year 2's that I read to...even students that don't read to him, they all know him" (Handler 6). "This little girl, I'd never met her before, I could see her coming towards me at a distance and she was carrying a book which was just about the same size as her ...and I realised she was heading straight for me, and then she said, "can I read Charlie a fairy tale?" And so...I'm seeing this as a ripple effect, because for that little girl, it was important for her to have this connection with Charlie and to be able to read [him] the story" (Handler 2).

Entire school community: Handlers perceived the dog's presence to facilitate social interactions between the wider community, including teachers and parents, stating, "I think...we are helping to improve the community at the school...because all of the children know the dog, all the teachers know the dog" (Handler 1).

Handlers considered dog education as the central strength of the program, where children learnt how to interact safely and responsibly with dogs. The teacher-handler relationship was viewed to be a significant barrier impacting on the program. In particular, teacher's lack of interest and awareness (although provided with reading material prior to implementation), the disruption to the class schedule, and lack of communication between the teacher and handler, which was viewed as particularly time dependant.

TEACHERS

Results from the questionnaires revealed an increase in positive affect, pro-social behaviour, negative affect, and total difficulties. Interview data revealed teachers perceived Story Dogs to provide students with a sense of being special, and considered the program to increase student's confidence, autonomy, and emotional and reading development.

A sense of being special: Rather than considering the program as extra work or remedial work, teachers felt the children involved in the program felt special to be one of the few selected to work with the dogs:

It makes them feel a little bit special as well. It's not so much that you're getting taken out to go and do work... It's just that little bit of extra special time that you get, and everyone in the class, when the dogs come, they all wish that they were there. So they feel like, "Oh wow, I've actually got a really special activity to do", they love it. It's not like they feel that they're being excluded from their own class, they're actually doing something they enjoy. I think it's beneficial (Teacher A).

Increased confidence: Teachers felt the students thrived "in particular, [in the] one on one" (Teacher C) environment Story Dogs provides. They perceived the program to assist children at not only "becoming a more

confident reader" (Teacher F), but also to facilitate children to build competence in social settings, identifying children in the Story Dogs program as exhibiting "a lot more confidence and sharing information with others, including adults" (Teacher C).

Increased autonomy: Teachers claimed students "love the books" (Teacher D), and the program, as "it's not for a purpose it's just for enjoyment" (Teacher B). They felt the program increased children's reading engagement outside the sessions, stating, "He's just picking up books and he's reading independently. Even his mum's said that she's seen a change in that. Now he can actually read on his own, and not have to have someone next to him" (Teacher A).

Emotional development: Teachers also perceived the Story Dogs program to increase pro-social behaviour, including "developing a wider range of friendships" (Teacher A), and "being able to initiate that peer interaction" (Teacher F). Teachers also felt the program had assisted children in regulating their behaviour: "On the days that he has Story Dogs I do realise that he's calmer when he comes back. Normally he's very hyperactive, can't really sit still, he will be calling out all the time, and on those days, he's calm" (Teacher A).

Reading development: Teachers stated children "are improving in their reading so, they've actually come about 4 or 5 levels from when they started Story Dogs... They're almost at level now" (Teacher A), whilst also developing "a more positive attitude towards [reading]... more willing to read" (Teacher A).

PARENTS

Qualitative interview data identified four main themes; child's relationship with the reading dog, reading related developments, emotional response to the program and parental support of the program.

Child's relationship with the reading dog: Parents identified that children often spoke about the Story Dog at home, "it's mainly the dog he talks about" (I2, L6-7), "he tells me a lot of things about the dog, that it does this, or does that, or slept, or made noise" (I3, L7-9). Parents stated children love the Story Dog, "even to the point where he's coming home asking to actually have a dog, and to adopt a dog as a pet!" (I5, L3-5). Parents felt Story Dogs provides a safe non-judgmental environment, claiming, "he knows that the dog can't actually read, so it doesn't matter if he gets it wrong" (I3, L26-27) because "dogs have no judgment" (I4, L55 – 58).

Reading-related developments: Parents felt the program allowed children "to enjoy reading" (I3, L61-63), develop "more confidence" (I3, L23-24) in reading, and increase their reading abilities, with comments like, "her reading has improved so much since she started the program" (I7, L27 – 28). Parents also noted a change in concentration and focus, stating, "he pays a lot more attention now than he used to before. Before it was just a short span of time, and then he's trying to do something else, and not interested in what's in front of him, or what he's been told to do" (I5, L51-55) and "he's a really hyped up kid anyway ... but he is becoming more... I can't think of the word ... he does sit for longer periods of time... he will concentrate that little bit more than what he used to" (I1, L38 – 47).

Emotional response to the program: All parents stated the children enjoyed being involved in the program. Parents noted a change in their child's affect since starting the program, or in relation to the program, commenting, "He'll know when he's going to see the dog, when he's reading to the dog. He's more excited in

the morning, to get up then" (I5, L79-81), and "He's a lot ... calmer in his approach ... he's not so much in your face" (I1, L64-66). Parents also identified an increase in pro-social behaviour since beginning the program, stating, "Now he's more interactive. What he used to do mainly was just keep to himself, like he was either by himself, or with his twin sister, that was most of his social people or interactional people ... and now he's more ... he looks forward to actually see other family members" (I5, L48-55), and "Now he's more interactive with... the kids within the street ... if he sees the next-door neighbour, he will say 'hi'. But he didn't do that before" (I5, L141-146). Some parents reported a desire for more information, stating, "I would have liked to have known that [child] was a) participating and ... more about it...Like the benefits and stuff as well, before he actually started, so we know what we're working towards (I1, L128-131; 150-152).

Parent response to the program: All parents viewed the program positively, with comments such as, "I would recommend it ... he does speak highly of it ... and I do feel like it has helped him" (I1, L161 – 164). Parent's felt the program was "a lovely idea. I'd never have considered getting him to read to a dog, but I think it's a really lovely idea that you wouldn't normally come up with" (I3, L56-59).

STUDENTS

Results of the four questionnaires reveal no significant differences on any score. However, findings from the interviews post-intervention identified four themes: emotions, engagement, relationships, and achievement.

Emotions: Students stated they felt "good" (Poppy and Benjamin), "happy" (Loki), and "excited" (Tony) when involved in the Story Dogs program. Some felt it improved their mood, claiming, "(I feel) happier...when I'm sad, it makes me happy" (Minimoo), and "[the dog] makes me laugh" (Loki). Students also described negative feelings associated with their involvement in the program: "[the dog] makes me feel annoyed because he's licking me" (Pineapple), and "[the dog's] barking at me... (I'm) scared" (Marshadow). Some students regretted leaving their favourite school activity to have a Story Dogs session, "but I'm still excited to read to [the dog]" (Poppy).

Engagement: Students expressed enjoyment from their involvement in the program, stating "I like reading to dogs" (Chocolate). Some felt the program enhanced their reading ability, "He's helped me in my reading and my dyslexia... he helped me feel better about reading" (Jeff), and reading enjoyment, "[the dog] makes me feel like I like reading" (Benjamin). Others felt that the program included "more of books that you enjoy" (Jeff). Students who previously disliked school, claimed the program enhanced their thoughts on school, moving the rating from 'zero' enjoyment, to 'ten' out of ten for enjoyment, with another student stating, "I like school better because I get to read to [the dog]" (Pineapple). Two students expressed dislike for the program, arguing, "It's for like [a] baby" (Marshadow), and "I don't like reading the book... it's too hard doing some of the words" (Zeppy).

Relationships: Students claimed that they discussed the program with their parents often, but rarely with their friends, as they were too busy playing.

Achievement: Some students felt the program had enhanced their reading confidence, stating, "[the dog's] given me like confidence" (Poppy), and "(I feel) more confident" (Minimoo). Others felt it increased their reading competence: "It feels like I'm getting better at reading the book that I'm reading" (Poppy), and "I feel more encouraged to read... I used to read one book, but now I'm reading multiple books" (Jeff).

IMPLICATIONS

IMPACT OF STORY DOGS ON CHILDREN'S WELLBEING

The present study used a mixed method approach to explore the impact of the Story Dogs program on the wellbeing of children who participate, through the lens of the Story Dog handler, the student, teacher, and parent. The quantitative results suggest no significant differences in the wellbeing of children participating in the program from weeks 12-20 on any of the domains measured. This was an unexpected finding, as the positive effects of therapy dogs on mood (Kaminski, Pellino & Wish, 2002), anxiety (Morgan, 2008), and prosocial behaviour (Byström & Persson, 2015; Esteves & Stokes, 2008; Martin & Furnum, 2002; Stevenson et al., 2015), among others, is well documented in the literature. Methodological challenges may have limited the conclusions drawn from the quantitative results. It is possible that a longer-term larger sample size or individual comparison, rather than group comparisons, could be explored and interpreted further. The qualitative findings from this study provide some insight into handlers, students, teachers, and parents perspectives on the impact of the Story Dogs program on participating children's wellbeing.

Qualitative findings indicate an overall positive response by all key stakeholder groups interviewed. Overlapping themes between groups related to the learning environment, emotional support, and reading related developments, including re-engagement, and pro-social behaviours. The learning environment was recognised as a safe, secure, and non-judgemental space, where participating children could engage in one-on-one interactions, and feel comfortable to establish a deep emotional connection with handler and dog. School often represents a social (Hassan, Jantan, & Fauzi, 2017; Sigurdson, Undheim, Wallander, Lydersen, & Sund, 2018) and academic (Pascoe, Parker, & Hetrick, 2019) judgemental space. In fact, peer pressure (Hassan et al., 2017), bullying (Ford, King, Priest, & Kavanagh, 2017; Sigurdson et al., 2018), and academic-related stress (Pascoe et al., 2019) have been identified as the leading causes of school stress. It appears that Story Dogs is attending to these stressors through their dog-assisted reading program, albeit within the limitations of the program's time spent in the school setting with students. This is a significant finding, given students who report high levels of academic related stress fare poorly on all measures of wellbeing (Organisation for Economic Co-operation and Development, 2017).

All parties discussed the emotional support provided through Story Dogs, with comments suggesting a significant increase in children's confidence in both reading and socialising behaviours. Confidence is an element of wellbeing, as reported by Avni-Babad (2011) and Olson and Kemper (2014). Yet, it was not included as a focal domain in the quantitative assessment tools. This is something to consider in further investigations. Also of relevance is the importance of confidence in positively contributing to reading performance (Clarke & De Zoysa, 2011). Given the main goal of the Story Dogs program is to enhance reading ability, it is not surprising that all parties identified reading related developments as a key outcome. This included positive changes in attitudes towards reading and pro-social classroom behaviours. This supports previous research indicating that dog-assisted reading programs can supplement students' academic motivation, interest and confidence (Friesen & Delisle, 2012; Kirnan, Siminerio, & Wong, 2016). Interestingly, several teachers selected students for participation in the program due to internalising and externalising problem behaviours. Children experiencing reading difficulties are more likely to present with low motivation to practice reading (Ecklund & Lamon, 2008). They are also more likely to experience internalising and externalising problems (Boyes, Leita, Claessen, Badcock, & Nayton, 2016). This includes anxiety, depression, withdrawal, attention and behavioural problems. The qualitative findings suggest the use of therapy dogs can decrease such behaviours, particularly for children with presenting problems. This is an important finding, given children with severe emotional disturbances are less likely to experience success at school, both academically and socially (Jaycox et al., 2009; McGorry, 2018). By fostering positive reading experiences, children appear to develop positive emotional states, which allow them to be more receptive to learning and overcoming negative emotional experiences and/or expectations when reading

(Amsterlaw, Lagattuta, & Meltzoff, 2009). As such, children's participation in Story Dogs has the potential to both enhance overall wellbeing and encourage positive attitudes towards reading, whilst also facilitating children's reading development by influencing emotional processes and the learning environment (Hall, Gee, & Mills, 2016).

CONSIDERATIONS FOR STORY DOGS ONGOING SUCCESS

The qualitative findings may enhance our understanding of factors for consideration the ongoing success of Story Dogs. Firstly, although the majority of children expressed only positive feedback about the program, some children expressed negative responses. These included the removal of students from preferred subjects at Story Dog session times, therapy dogs barking, and licking children to their dismay, and feeling like the program was aimed at a younger age group. This highlights the importance of planning, monitoring, and executing sessions whilst factoring the student voice. Making minor adjustments to the program may have alleviated these negative elements for students. For example, clearer communication with schools and teachers about the program's intent and clearer guidelines for handlers re expected behaviours of dogs. Next, some parents expressed a desire for greater information about the program, such as the evidence base behind it, and the goals of the program. Making such resources available would be advantageous. Handlers felt dog education was a key strength of the program. Approximately 700 children per year are hospitalised in Australia due to dog-related injuries (AIHW, 2017). The findings suggest involvement in the program may reduce children's risk of dog related injuries. Lastly, the relationship between teacher and handler presented as a key factor for consideration. Teachers attitudes towards educational initiatives play a major role in the subsequent success or failure of any educational initiative (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2009; Datnow, Lasky, Stringfield, & Teddlie, 2006; Turnbull, 2002). Teachers did express concern over reading instructions methods used by Story Dogs noting the need for Handlers to be upskilled in the specific school's approach to reading instruction, including the use of appropriate feedback cues and rewards. They also noted that if the child is reading to the dog then correction by the handler must be minimal and the need for rewards such as stickers needs further consultation. Handlers comments reveal teacher buy-in to the Story Dogs program may be poor. Responses suggest this may be in part due to a lack of interest and awareness, perceived disruption to the class timetable, and time constraints. Research indicates teachers have an excessive workload (Buchanan et al., 2013; Laming & Horne, 2013), with increased administrative duties (Handel, Watson, Petcock, & Maher, 2013). Providing information in concise and easily assessable and/or multiple formats may assist with knowledge and awareness. Careful planning and monitoring of session times may alleviate class disruptions and provide time for brief communication. Having formal procedures in place for handlers to meet with the student's teacher prior to commencing could support the handler-teacher relationship.

REFERENCES

- Australian Government Department of Education. (2018). *The Family-School Partnerships Framework – A guide for schools and families*. Retrieved from <http://www.familyschool.org.au/files/9413/7955/4757/framework.pdf>
- Avni-Babad, D. (2011). Routine and feelings of safety, confidence and wellbeing. *British Journal of Psychology*, 102(2), 223-244.
- Barr, A., Gillard, J., Firth, V., Scrymgour, M., Welford, R., Lomax-Smith, J., ... Constable, E. (2008). *Melbourne declaration on educational goals for young Australians*. Melbourne: Ministerial Council on Education, Employment, Training and Youth Affairs. Retrieved from https://monash.hosted.exlibrisgroup.com/MON:au_everything:catau5122592235000_175
- Beetz, A., & McCardle, P. (2017). Does reading to a dog affect reading skill? In N. R. Gee, A. H. Fine, & P. McCordle (Eds.). *How animals help students learn: Research and practice for educators and mental-health professionals*. (pp. 111-123). New York, NY, US: Routledge/Taylor & Francis Group.
- Beyond Blue. (2019). *What is mental health?* Retrieved from <https://www.beyondblue.org.au/the-facts/what-is-mental-health>
- Black Dog Institute. (2016). *Prevention of depression and anxiety in Australian schools*. Retrieved from <https://www.blackdoginstitute.org.au/docs/defaultsource/research/evidence-and-policy-section/prevention-of-depression-and-anxiety-inaustralian-schools.pdf?sfvrsn=2>
- Boyd, D. J., Grossman, P. L., Lankford, H., Loeb, S., & Wyckoff, J. (2009). Teacher preparation and student achievement. *Educational Evaluation and Policy Analysis*, 31(4), 416-440. doi:10.3102/0162373709353129
- Boyes, M. E., Leitao, S., Claessen, M., Badcock, N. A., & Nayton, M. (2016). Why are reading difficulties associated with mental health problems? *Dyslexia*, 22(3), 263-266. doi:10.1002/dys.1531
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa
- Brown, N. J., Lomas, T., Eiroa-Orosa, F. J., (2018). *The routledge international handbook of critical positive psychology*. Retrieved from https://monash.hosted.exlibrisgroup.com/MON:au_everything:catau51319500700001751
- ‘Buchanan, J., Prescott, A., Schuck, S., Aubusson, P., Burke, P., & Louviere, J. (2013). Teacher retention and attrition: Views of early career teachers. *Australian Journal of Teacher Education*, 38(3), 112-129. <http://dx.doi.org/10.14221/ajte.2013v38n3.9>
- ‘Byström, K. M., & Persson, C. A. L. (2015). The Meaning of Companion Animals for Children and Adolescents with Autism: The Parents' Perspective. *Anthrozoös*, 28(2), 263-275. doi:10.1080/08927936.2015.11435401
- Clarke, C., & De Zoysa, S. (2011). *Mapping the interrelationships of reading enjoyment, attitudes, behaviour, and attainment: An exploratory investigation*. Retrieved from <https://literacytrust.org.uk/research-services/research-reports/mappinginterrelationships-reading-enjoyment-attitudes-behaviour-and-attainment-2011/>.

- Connell, C. G., Tepper, D. L., Landry, O., & Bennett, P.C. (2019). Dogs in schools: The impact of specific human-dog interactions on reading ability in children aged 6 to 8 years. *Anthrozoös*, 32(3), 347-360.
doi:10.1080/08927936.2019.1598654
- Datnow, A., Lasky, S., Stringfield, S., & Teddlie, C. (2006). *Integrating educational systems for successful reform in diverse contexts*. New York: Cambridge University Press.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542-575. doi:10.1037/0033-2909.95.3.542
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75. doi:10.1207/s15327752jpa4901_13
- Esteves, S. W., & Stokes, T. (2008). Social Effects of a Dog's Presence on Children with Disabilities. *Anthrozoös*, 21(1), 5-15. doi:10.1080/08927936.2008.11425166
- Ford, R., King, T., Priest, N., & Kavanagh, A. (2017). Bullying and mental health and suicidal behaviour among 14- to 15-year-olds in a representative sample of Australian children. *Australian & New Zealand Journal of Psychiatry*, 51(9), 897-908. doi:10.1177/0004867417700275
- Friesen, L. (2010). Exploring animal-assisted programs with children in school and therapeutic contexts. *Early childhood education journal*, 37(4), 261-267.
- Friesen, L., & Delisle, E. (2012). Animal-assisted literacy: A supportive environment for constrained and unconstrained learning. *Childhood Education*, 88(2), 102-107. doi:10.1080/00094056.2012.66212
- Fulmer, S. M., & Frijters, J. C. (2011). Motivation during an excessively challenging reading task: The buffering role of relative topic interest. *The Journal of Experimental Education*, 79(2), 185-208.
doi:10.1080/00220973.2010.481503
- Garrison, D., Cleveland-Innes, M., Koole, M., & Kappelman, J. (2006). Revisiting methodological issues in transcript analysis: Negotiated coding and reliability. *The Internet and Higher Education*, 9(1), 1-8.
doi:10.1016/j.iheduc.2005.11.001
- Goldberg, J., Sklad, M., Elfrink, T., Schreurs, K., Bohlmeijer, E., & Clarke, A. (2018). Effectiveness of interventions adopting a whole school approach to enhancing social and emotional development: A meta-analysis. *European Journal of Psychology of Education*, 34(4), 1-28. doi: 10.1007/s10212-018-0406-9
- Greenspoon, P. J., & Saklofske, D. H. (2001). Toward an integration of subjective well-being and psychopathology. *Social Indicators Research*, 54(1), 81-108.
- Hall, S. S., Gee, N. R., & Mills, D. S. (2016). Children reading to dogs: A systematic review of the literature. *PloS one*, 11(2), e0149759-e0149759. doi:10.1371/journal.pone.0149759
- Hassan, A., Jantan, R., & Fauzi, M. (2017). Level of stress and sources of stress and anxiety among secondary school students. *Science International*, 29(4), 959. Retrieved from <http://www.sci-int.com/pdf/636398815979774997.pdf>
- Huebner, E. S. (1994). Preliminary development and validation of a multidimensional life satisfaction scale for children. *Psychological assessment*, 6(2), 149-158. doi:10.1037/1040-3590.6.2.149

- Jalongo, M. R. (2018). *Children, dogs and education: Caring for, learning alongside and gaining support from canine companions*. <https://doi.org/10.1007/978-3-319-77845-7>
- Jalongo, M., & Petro, J. (2018). Promoting Children's Well-Being: Therapy Dogs. In M. J. Jalongo (Eds.). *Children, Dogs and Education* (pp. 179-209). Indiana, PA: Springer
- Jaycox, L., Stein, B., Paddock, S., Miles, J., Chandra, A., Meredith, L., . . . Burnam, M. (2009). *Impact of teen depression on academic, social, and physical functioning*. *Pediatrics*, 124(4), 596-605. doi:10.1542/peds.2008-3348
- Kaminski, M., Pellino, T., & Wish, J. (2002). Play and Pets: The Physical and Emotional Impact of Child-Life and Pet Therapy on Hospitalized Children. *Children's Health Care*, 31(4), 321-335. doi:10.1207/S15326888CHC3104_5
- Kirnan, J. P., Siminerio, S., & Wong, Z. (2016). The impact of a therapy dog reading program on children's reading skills and attitudes toward reading. *Early Childhood Education Journal*, 44(6), 637-651. doi:10.1007/s10643-015-0747-9
- Manderscheid, R., Ryff, C., Freeman, E., Mcknight-Eily, L., Dhingra, S., & Strine, T. (2010). Evolving definitions of mental illness and wellness. *Preventing Chronic Disease*, 7(1), 19. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/20040234>
- Martin, F., & Farnum, J. (2002). Animal-assisted therapy for children with pervasive developmental disorders. *Western journal of nursing research*, 24(6), 657-670.
- McGorry, P. D. (2018). Beyond psychosis: Early intervention and youth mental health. *Journal of the American Academy of Child & Adolescent Psychiatry*, 57(10), 76-77. <https://doi.org/10.1016/j.jaac.2018.07.322>
- Mission Australia. (2017). *Youth mental health report*. Retrieved from https://blackdoginstitute.org.au/docs/default-source/research/evidence-and-policy-section/2017-youth-mental-health-report_mission-australia-and-black-doginstitute.pdf?sfvrsn=6
- Morgan, T. D. (2008). An examination of the anxiolytic effects of interaction with a therapy dog. (Doctoral Dissertation). Retrieved from <https://pdfs.semanticscholar.org/5510/3b9b26ae8c8afc1f5c6460e67eded0603ae0.pdf>
- Nimer, J., & Lundahl, B. (2007). Animal-assisted therapy: A meta-analysis. *Anthrozoös*, 20(3), 225-238. doi:10.2752/089279307X224773.
- Olson, K. & Kemper, K. J. (2014). Factors associated with wellbeing and confidence in providing compassionate care. *Journal of Evidence-Based Integrative Medicine*, 19, 292-296.
- Organisation for Economic Co-operation and Development. (2017). PISA 2015 results (volume III): Students' well-being. Retrieved from <https://www.oecdilibrary.org/docserver/9789264273856-en.pdf?expires=1570588471&id=id&accname=guest&checksum=BC7E38A269D7FC1744EA531599A0E351>
- Pascoe, M. C., Parker, A. G., & Hetrick, S. E. (2019). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth*, 1-9. doi:10.1080/02673843.2019.1596823
- Prentice, M. (2019). Therapy dogs and students' wellbeing: The Handlers' Perspective. (Graduate Diploma of Professional Psychology Thesis). Monash University: Melbourne, Australia.
- R.E.A.D. Dogs Minnesota (n.d.). *What is R.E.A.D.?* Retrieved from <http://www.readdogsmn.org>

- Rey, D., & Neuhäuser, M. (2011). Wilcoxon-signed-rank test. In M. Lovric (Ed.). *International encyclopedia of statistical science* (pp. 1658-1659). Berlin, Heidelberg: Springer Berlin Heidelberg.
- Schena, H., M. (2019). *Therapy dog reading program for child wellbeing: the teacher perspective*. (Master's thesis). Monash University, Melbourne, Australia.
- Seligman, M. (2011). *Flourish*. New York: Simon & Schuster.
- Sigurdson, J., Undheim, A., Wallander, J., Lydersen, S., & Sund., A. (2018). The longitudinal association of being bullied and gender with suicide ideations, self-harm, and suicide attempts from adolescence to young adulthood: A cohort study. *Suicide and Life-Threatening Behavior*, 48(2), 169-182. doi:10.1111/sltb.12358
- Snyder, C. R., Hoza, B., Pelham, W. E., Rapoff, M., Ware, L., Highberger, L., . . . Stahl, K. J. (1997). The development and validation of the children's hope scale¹. *Journal of Pediatric Psychology*, 22(3), 399-421. doi:10.1093/jpepsy/22.3.399
- Souter, M., & Miller, M. (2007). Do animal-assisted activities effectively treat depression? A meta-analysis. *Anthrozoös*, 20(2), 167-180. doi:10.2752/175303707X207954
- Stevenson, K., Scott, J., Hinchcliffe, V., & Roberts, K. (2015). Can a dog be used as a motivator to develop social interaction and engagement with teachers for students with autism? *Support for Learning*, 30(4), 341-363. doi:10.1111/1467-9604.12105
- Story Dogs. (n.d.). *Story Dogs*. Retrieved from <https://storydogs.org.au/>
- Story Dogs. (2009). *Story dogs brochure*. Retrieved from <https://irpcdn.multiscreensite.com/a1067652/files/uploaded/Brochure-V9-March-2017-front-andback.pdf>
- Story Dogs. (2018). *Volunteer information pack*. Retrieved from <https://irpcdn.multiscreensite.com/a1067652/files/uploaded/Volunteer-Information-PackV28.pdf>
- Trainer, L. (2019). *Therapy Dogs in Educational Settings: the perspective of parents*. (Master's thesis). Monash University, Melbourne, Australia.
- Turnbull, B. (2002). Teacher participation and buy-in: Implications for school reform initiatives. *Learning Environments Research*, 5(3), 235-252. doi:10.1023/A:1021981622041
- Walsh, P. G. & Mertin, P. G. (1994). The training of pets as therapy dogs in a women's prison: A pilot study. *Anthrozoös*, 7(2), 124-128.
- Wanxing, F. L. (2019). *Use of Therapy Dogs in Educational Settings: exploring the impact of a dog-assisted reading program on children's perceived wellbeing*. (Master's thesis). Monash University, Melbourne, Australia.
- World Health Organisation (2018). *Adolescent mental health*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>

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APPENDIX A

Explanatory States and Consent forms

Explanatory Statement for Schools



MONASH University

EXPLANATORY STATEMENT Therapy Dogs in Educational Settings

Project: Therapy Dogs in Educational Settings

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Hi, we are Felicia Lee, Hannah Schena and Louisa Trainer. We are inviting your school to take part in our study. Please read this Explanatory Statement in full before deciding whether or not to participate in this research. If you would like further information regarding any aspect of this project, you are encouraged to contact the researchers via the email addresses listed above.

What does the research involve?

The aim of this research project is to investigate the impact of therapy dogs on children's well-being when used in educational settings. Specifically, this research will examine how children experience the program and the impact of the program on their attitudes, relationships and emotions. This will be done by conducting interviews and administering questionnaires to students, their parents and teachers.

Specifically, students, parents and teachers will be asked to do the following:

- i. Complete a pre- and post-program, de-identified survey, that should take approximately 10-15 minutes to complete

- ii. Participate in an in-person or over the phone interview with one of our researchers, that should take approximately 20-30 minutes to complete

Why were you chosen for this research?

Your school has been invited to participate in this research because one or more of your students is involved in the Story Dogs program. Janine Sigley, Managing Director/ Cofounder of Story Dogs, has contacted you with some information of the research on behalf of the researchers.

Consenting to participate in the project and withdrawing from the research

The consent process for this research project involves the following:

- i. Read the Explanatory Statement to fully understand the project before giving informed consent to participate in the study;
- ii. Participation in this study is completely voluntary. You are not under any obligation to participate;
- iii. If you decide to participate in the study, please read and complete the consent form provided;
- iv. You have the right to withdraw from further participation in the research, without any adverse implications at any stage up until the end of the data gathering period (NB: the end of the data gathering period is once you complete the survey and it is collected)

Possible benefits and risks to participants

It is anticipated that participation in this project will provide an opportunity for students, parents and teachers to reflect on how they feel about the therapy dogs program. As there is little research into the impact on well-being of children who participate in therapy dogs programs, this research may help educational settings in making decisions about whether to incorporate such programs into their schools. If there are significant benefits to the children who spend time with therapy dogs, this may lead to the program becoming more widely acknowledged and implemented in schools. It is not anticipated that participation in this research will pose any risks to you as a result of your participation. You will not be identified by name in the findings of the project and nor will you be required to answer any questions you consider personal, intrusive, or potentially distressing.

Please note, there is no risk if you choose not to participate or decide to withdraw from participation.

Data will be collated as de-identifiable data and at no time will the participants or responses be identifiable to others.

Confidentiality

Confidentiality and anonymity of the participants and their data will be maintained as the survey will be de-identified. No names of participants or of schools will be collected via the online survey.

Storage of data

The data generated from this research project will be stored in a password-protected internal network drives owned by Monash University and protected by the Chief Investigators Dr Linda Henderson and Dr Christine Grove. The data will be deleted and destroyed in five years if it is no longer required.

Results

Results of the project will be disseminated at conferences, in practitioner and academic journals and a final report to Janine at Story Dogs. No findings of a personal nature will be included in these reports. If requested, we can provide you with a copy of the final report with our findings.

If you would like to speak with the chief investigators of this study, please contact Linda or Christine:

Dr Linda Henderson
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Complaints

Should you have any concerns or complaints about the conduct of the project, you are welcome to contact the Executive Officer, Monash University Human Research Ethics (MUHREC):

Executive Officer
Monash University Human Research Ethics Committee (MUHREC)
Room 111, Chancellery Building E,
24 Sports Walk, Clayton Campus
Research Office
Monash University VIC 3800

Tel: +61 3 9905 2052
Email: muhrec@monash.edu
Fax: +61 3 9905 3831

Thank you,
Felicia, Hannah and Louisa.



MONASH University

Principal Consent

NOTE: Signed written consent will remain with the Monash University researcher for their records.

I _____ (your name) agree for my school to take part in the above Monash University research project.

The project has been explained to me, and I have read the Explanatory Statement, which I keep for my records.

I understand that agreeing to take part means that I _____ (your name) am willing to allow the researchers to contact selected students, parents and teachers involved in the Story Dogs program at my school

Your name: _____

Your signature: _____

Date: _____

Preferred contact details:

Email: _____ Phone: _____

Please email your completed form to:

- ☐ Dr Linda Henderson: linda.henderson@monash.edu
or
- ☐ Dr Christine Grove: christine.grove@monash.edu



EXPLANATORY STATEMENT
Therapy Dogs in Educational Settings

Project: Therapy Dogs in Educational Settings

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Hi, we are Felicia Lee, Hannah Schena and Louisa Trainer. We are inviting your school to take part in our study. Please read this Explanatory Statement in full before deciding whether or not to participate in this research. If you would like further information regarding any aspect of this project, you are encouraged to contact the researchers via the email addresses listed above.

What does the research involve?

The aim of this research project is to investigate the impact of therapy dogs on children's well-being when used in educational settings. Specifically, this research will examine how children experience the program and the impact of the program on their attitudes, relationships and emotions.

If you agree to participate in this research, you will be asked to do the following:

- i. Complete a pre- and post-program, de-identified survey. For parents, the survey should take approximately 10-15 minutes to complete. Your child's survey should take approximately 30 minutes to complete.
- ii. Participate in an in-person or over the phone interview with one of our researchers, that should take approximately 20-30 minutes to complete. Your child will be asked to participate in an in-person interview with one of our researchers, that should take approximately 30 minutes to complete.

Why were you chosen for this research?

You have been invited to participate in this research because your child is involved in the Story Dogs program.

Consenting to participate in the project and withdrawing from the research

The consent process for this research project involves the following:

- i. Read the Explanatory Statement to fully understand the project before giving informed consent to participate in the study;
- ii. Participation in this study is completely voluntary. You are not under any obligation to participate;
- iii. If you decide to participate in the study, please read and complete the consent form provided;
- iv. You have the right to withdraw from further participation in the research, without any adverse implications at any stage up until the end of the data gathering period (NB: the end of the data gathering period is once you complete the survey and it is collected)

Possible benefits and risks to participants

It is anticipated that participation in this project will provide an opportunity for you and your child to reflect on your experiences with the Story Dogs program. As there is little research into the impact on well-being of children who participate in therapy dog programs, this research may help educational settings in making decisions about whether to incorporate such programs into their schools. If there are significant benefits to the children who spend time with therapy dogs, this may lead to the program becoming more widely acknowledged and implemented in schools. It is not anticipated that participation in this research will pose any risks to you or your child as a result of your participation. You will not be identified by name in the findings of the project and nor will you be required to answer any questions you consider personal, intrusive, or potentially distressing.

Please note, there is no risk if you choose not to participate or decide to withdraw from participation.

Data will be collated as de-identifiable data and at no time will the participants or responses be identifiable to others.

Confidentiality

Confidentiality and anonymity of the participants and their data will be maintained as the survey will be de-identified. No names of participants or of schools will be collected via the survey.

Storage of data

The data generated from this research project will be stored in a password-protected internal network drives owned by Monash University and protected by the Chief Investigators Dr Linda Henderson and Dr Christine Grove. The data will be deleted and destroyed in five years if it is no longer required.

Results

Results of the project will be disseminated at conferences, in practitioner and academic journals and a final report to Janine at Story Dogs. No findings of a personal nature will be included in these reports. If requested, we can provide you with a copy of the final report with our findings.

If you would like to speak with the chief investigators of this study, please contact Linda or Christine:

Dr Linda Henderson
Senior Lecturer Early Years, Course Leader
Early Years
Education
Monash University
Telephone: +61 9905 9128
email: linda.henderson@monash.edu

Dr Christine Grove
Educational & Developmental Psychologist
Education
Monash University
Telephone: +61 3 9905 0803
email: christine.grove@monash.edu

Complaints

Should you have any concerns or complaints about the conduct of the project, you are welcome to contact the Executive Officer, Monash University Human Research Ethics (MUHREC):

Executive Officer

Monash University Human Research Ethics Committee (MUHREC)

Room 111, Chancellery Building E,

24 Sports Walk, Clayton Campus

Research Office

Monash University VIC 3800

Tel: +61 3 9905 2052

Email: muhrec@monash.edu

Fax: +61 3 9905 3831

Thank you,
Felicia, Hannah and Louisa.



MONASH University

Parent Consent

NOTE: Signed written consent will remain with the Monash University researcher for their records.

I _____ (your name) agree to take part in the above Monash University research project.

I agree that _____ (child's name) may take part in the above Monash University research project.

The project has been explained to me, and I have read the Explanatory Statement, which I keep for my records.

I understand that agreeing to take part means that I am willing to allow myself _____ (your name) and my child _____ (child's name) to:

- | | | |
|--|------------------------------|-----------------------------|
| <input type="checkbox"/> Complete the pre- and post-program questionnaires | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="checkbox"/> Be interviewed by the researcher | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| <input type="checkbox"/> Have the interview audio-taped | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

Parent's / Guardian's Name: _____

Parent's / Guardian's relationship to participant: _____

Parent's / Guardian's Signature: _____

Date: _____

Preferred contact details:

Email: _____ Phone: _____

Please email your completed form to:

- ☐ Dr Linda Henderson: linda.henderson@monash.edu

or

- ☐ Dr Christine Grove: christine.grove@monash.edu



MONASH University

Children's Assent Form for the Story Dogs Project

Hello, it's so nice to meet you!

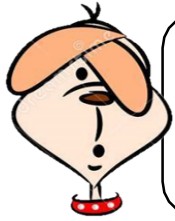
We are Felicia, Hannah, and Louisa. We go to a school where we study how to help children learn better and be happy. We would like find out about children's experiences reading to a Story Dog. Would you like to help us find out?

Would it be okay if you complete some forms on how you feel about school and life? This will take about 15 minutes. I will read you the questions and explain anything you do not understand. *(Please circle)*



You may stop any of these activities at any time if you want to, just let us know.

We would like to write and talk about your experiences reading to a Story Dog with other people who are interested. No one will know that we are talking about you because we will be using a 'pretend' name. Is there a 'pretend' name you would like to choose for yourself?



My 'pretend' name is:

Your Signature: _____

Your name: _____

Date: _____

Thank you!
Felicia Lee, Hannah Schena & Louisa Trainer
Monash University



MONASH University

Children's Assent Form for the Story Dogs Project

Hello, it's so nice to meet you again!

We are Felicia, Hannah, and Louisa. We go to a school where we study how to help children learn better and be happy. We would like find out about children's experiences reading to a Story Dog. Would you like to help us find out?

Would it be okay if you complete some forms on how you feel about school and life? This will take about 15 minutes. I will read you the questions and explain anything you do not understand. (Please circle)



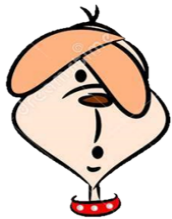
We would also like to ask you some questions on how you feel about reading to a Story Dog. This will take about 30 minutes. Is that okay today? (Please circle)



You may stop any of these activities at any time if you want to, just let us know. Is it okay if we record what you say when you tell us your stories? This will help us remember what you say. (Please circle)



We would like to write and talk about your experiences reading to a Story Dog with other people who are interested. No one will know that we are talking about you because we will be using a ‘pretend’ name. Is there a ‘pretend’ name you would like to choose for yourself?



Your Signature: _____

Your name: _____

Date: _____

Thank you!

Felicia Lee, Hannah Schena & Louisa Trainer
Monash University

Handlers' Consent Form

NOTE: Signed written consent will remain with the Monash University researcher for their records.

I _____ (your name) agree to take part in the above Monash University research project.

The project has been explained to me, and I have read the Explanatory Statement, which I keep for my records.

I understand that agreeing to take part means that I am willing to allow myself _____ (your name) to:

- | | | |
|------------------------------------|------------------------------|-----------------------------|
| ▪ Be interviewed by the researcher | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| ▪ Have the interview audio-taped | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

Your name: _____

Your signature: _____

Date: _____

Preferred contact details:

Email: _____ Phone: _____

Please email your completed form to:

- Dr Christine Grove: christine.grove@monash.edu

Or

- Marcelle Prentice: mpre0011@student.monash.edu

APPENDIX B

Ethics Approval

Monash University Ethics Committee Approval Certificate



Monash University Human Research Ethics Committee

Approval Certificate

This is to certify that the project below was considered by the Monash University Human Research Ethics Committee. The Committee was satisfied that the proposal meets the requirements of the *National Statement on Ethical Conduct in Human Research* and has granted approval.

Project ID: 17505
Project Title: Use of Therapy Dogs in Educational Settings: Guidelines and Recommendations for Implementation
Chief Investigator: Dr Christine Grove
Approval Date: 09/11/2018
Expiry Date: 09/11/2023

Terms of approval - failure to comply with the terms below is in breach of your approval and the *Australian Code for the Responsible Conduct of Research*.

1. The Chief Investigator is responsible for ensuring that permission letters are obtained, if relevant, before any data collection can occur at the specified organisation.
2. Approval is only valid whilst you hold a position at Monash University.
3. It is responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval and to ensure the project is conducted as approved by MUHREC.
4. You should notify MUHREC immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
5. The Explanatory Statement must be on Monash letterhead and the Monash University complaints clause must include your project number.
6. Amendments to approved projects including changes to personnel must not commence without written approval from MUHREC.
7. Annual Report - continued approval of this project is dependent on the submission of an Annual Report.
8. Final Report - should be provided at the conclusion of the project. MUHREC should be notified if the project is discontinued before the expected completion date.
9. Monitoring - project may be subject to an audit or any other form of monitoring by MUHREC at any time.
10. Retention and storage of data - The Chief Investigator is responsible for the storage and retention of the original data pertaining to the project for a minimum period of five years.

Kind Regards,

Professor Nip Thomson

Chair, MUHREC

CC: Dr Linda Henderson, Miss Wanning Lee

List of approved documents:

Document Type	File Name	Date	Version
Supporting Documentation	Introductory Email_Schools considering therapy dog program	31/10/2018	1
Supporting Documentation	Introductory Email_Schools with an existing therapy dog program	31/10/2018	1
Supporting Documentation	Introductory Email_Therapy dog organizations	31/10/2018	1
Questionnaires / Surveys	Survey Questions_Schools considering therapy dog program	31/10/2018	1
Questionnaires / Surveys	Survey Questions_Schools with an existing therapy dog program	31/10/2018	1
Questionnaires / Surveys	Survey Questions_Therapy dog organizations	31/10/2018	1
Explanatory Statement	Explanatory Statement_Schools considering therapy dog program	31/10/2018	1
Explanatory Statement	Explanatory Statement_Schools with an existing therapy dog program	31/10/2018	1
Explanatory Statement	Explanatory Statement_Therapy dog organizations	31/10/2018	1



Department of
Education & Training

2 Treasury Place
East Melbourne Victoria 3002
Telephone: 03 9637 2000
DX210083

2018_003878

Dr Christine Grove
Faculty of Education
Monash University
19 Ancora Imparo Way
CLAYTON 3800

Dear Dr Grove

Thank you for your application of 2 November 2018 in which you request permission to conduct research in Victorian government schools titled *Therapy Dogs in Educational Settings*.

I am pleased to advise that on the basis of the information you have provided your research proposal is approved in principle subject to the conditions detailed below.

1. Department approved research projects currently undergoing a Human Research Ethics Committee (HREC) review are required to provide the Department with evidence of the HREC approval once complete.
2. The research is conducted in accordance with the final documentation you provided to the Department of Education and Training.
3. Separate approval for the research needs to be sought from school principals. This is to be supported by the Department of Education and Training approved documentation and, if applicable, the letter of approval from a relevant and formally constituted Human Research Ethics Committee.
4. The project is commenced within 12 months of this approval letter and any extensions or variations to your study, including those requested by an ethics committee must be submitted to the Department of Education and Training for its consideration before you proceed.
5. As a matter of courtesy, you advise the relevant Regional Director of the schools that you intend to approach. An outline of your research and a copy of this letter should be provided to the Regional Director or governing body.
6. You acknowledge the support of the Department of Education Training in any publications arising from the research.

APPENDIX C

Interview schedules

Student:

Thank you for agreeing to share your stories about Story Dogs with me!

I will be asking you some questions about your experience reading to a Story Dog. This will take about 20 minutes. I will record what you say so that I can remember it. There may be times where I would also be writing some notes on my paper. Don't worry, I am just trying to keep track of what we are discussing.

Remember that it is completely your choice to talk to me. We can stop at any time – you do not have to give me a reason. You may also choose not to answer any question. Just let me know, and we can move on to the next question or stop. There are also no right or wrong answers. I just want to know about your experience reading to a Story Dog.

Before we start, do you have any questions about what we are about to do?

Are you still okay to do it?

1. How was your time participating in the Story Dogs program like?
 - a. If you liked it, what did you like/enjoy about it?
 - b. If you did not like it, what did you not like/enjoy about it?
2. How do you feel when you are reading to the dog?
3. Have you noticed any change in your mood or feelings since participating in the program? If yes, in what way and why? If no, why do you say so?
4. Do you feel the same when you are reading to the dog and when you are reading to your family/teacher/classmate? What is the same/different?
5. Has anything changed in the way you feel about reading since you participated in Story Dogs? If yes, what and why? If no, why do you say so?
6. Do you talk to your friends or classmates about Story Dogs? If yes, what do you talk about? If no, why not?
7. Has anything changed in the way you talk or play with your classmates/friends since you participated in Story Dogs? If yes, in what way and why? If no, why do you say so?

8. Do you talk to your family about Story Dogs? If yes, what do you talk about? If no, why not?
9. Has anything changed in the way you talk to your family since you participated in Story Dogs? If yes, in what way and why? If no, why do you say so?
10. How has school been for you?
11. Has anything changed in the way you feel about school/learning since participating in the program? If yes, in what way and why? If no, why?
12. Is anything different when you go to school on a Story Dogs day?
13. Has taking part in Story Dogs helped you in any way (other than reading)? If yes, in what way and why? If no, why do you say so?
14. Has anything changed in the way you feel about yourself since participating in the program? If yes, in what way and why? If no, why?
15. Was there anything that you did not like/enjoy about Story Dogs?
16. How can we improve on the Story Dog program so that you or other children might enjoy it more?
17. Is there anything else you would like to tell me?
18. Do you have any questions about what we discussed?

Thank you!

Parents and Teachers:

General experience with story dogs

1. How do you think your child feels about the Story Dogs program?
 - a. If yes, what they enjoy
 - b. If no, what is about they don't like
2. Does the child speak about the program at home? If so what have they told you?

Wellbeing

3. Have you noticed any changes in your child's behaviour? If so, how?
4. Have you noticed any changes in the ways your child interacts with others such as peers?
5. Have you noticed any changes in the way your child interacts with you and your family since participating in StoryDogs?
6. How has you child been going at school/ how have they experienced school? Have you noticed any changes since starting the program?
7. How does your child feel about going to school? – do you notice any difference when he/she's seeing therapy dogs that day?

Reading

8. How do you think your child feels about reading/ what does he/she say? Does he/she enjoy reading?
9. Do you and your child read together? How often?

Parent experience of the program

10. What are your thoughts on the Story Dogs program?
11. Would you recommend the program to others?

Semi-Structured Interview Questions: Story Dog Handlers

I want to let you know though before we begin, doing this interview is entirely your choice and even though you are taking part you can stop at any time without a reason, and it's also entirely up to you whether you want to answer all of my questions. So if there's a question that you'd rather not answer, you can just let me know and we'll move straight on to the next question. I will be recording this interview for ease of transcription at the end. Our interview recording will be deleted as soon as it has been transcribed.

Finally, all the information that I collect from you will be kept private which means I will make sure that no one will be able to identify you personally by your answers. You can check that yourself because you'll be receiving a copy of the interview before I do any work on it if you choose. So you can make any changes to it. There are no right or wrong answers I just want to know what your thoughts are of the program.

Do you have any questions before we begin? Okay, thanks! I'm going to start by asking you a few general and specific questions about the program.

1. Are you able to describe what you see as being the perceived benefits of the Story Dogs program for the students?
2. Can you provide specific examples where you have witnessed Story Dogs having a direct positive impact on the students?
3. Are you able to identify and describe any key contributing factors that led to the positive impact on the students in the examples you have given?
4. Have you experienced any barriers to carrying out your designated duties as a Story Dogs handler? Are you able to describe what these barriers were and their impact on:

Further information

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Wellington Road
Clayton, Victoria 3800
Australia

T: +61 9905 9128

E: linda.henderson@monash.edu

monash.edu.au