



Speaker	Assoc/Prof Hayley Christian
Talk title	What dogs can do for us
Venue	The Globe
Time	Tuesday 29 October 2019, 5.30pm

Diane Arnott

Good evening everyone

To start with I would like to acknowledge the Whadjuk Noongar people as the traditional owners of this lands and pay my respects to the elders, past, present and emerging.

So, Raising the Bar, this is the second year we have done this, and we get to hear of our incredible researchers. For me, one of the best parts about at the University, is, I get to meet these incredible people who are so passionate that the things that they do and then we can get to come out here and you can all hear about what it is they do with a drink in hand, which is by far the best way to hear about their research, I think.

I have been instructed to tell you that if you are doing the social media thing, that we have some tags, you can tag @UWAresearch and #rtbperth19 if you are posting about this event. I am far too old to do that but some of you are more likely to do that.

We wanted to actually ... wanted to ask a question about whether or not you are all in academia or if you are from somewhere else. If you are an academic and you are here to support one of your friends, can we have a show of hands?

No one? Oh okay, one, two, three, a few, that's interesting, interesting.

Tonight's first speaker is Hayley Christian, who I have actually known for about three years now.

Hayley Christian is an Associate Professor at the Telethon Kids Institute and The University of Western Australia and does some really cool research in kid's activities. You can ask her about the Superman Belt on her five-year-old, a bit later, to watch their activities.

If any of you have five-year-olds, you can imagine how they bounce all over the place, it's really interesting work.

Also, part of her work is looking at how owning a dog is beneficial to your activity levels and if there are any dog owners here, you probably know that once they learn the word, "walk" you are getting activity all the time.

I got the same activity twice a day for about ten years with my dog and I am sure it was greatly beneficial for him, I am not sure for me at 5:00 am but definitely for him.

So, I will introduce Hayley to you now who will talk about the benefits of owning a dog.

[clapping]

Associate Professor Hayley Christian

Thank you, thanks for having me and thanks for coming along.

I have another question before we start. Who here has a pet at home, any type of pet?

You are probably a little bit more than the general population. So about 60% of people in Australia have some type of pet and I reckon there was about 80% of hands that went up that time, so, that's good, we are in a pet-friendly room.

How about the dog owners in the room, who has got a dog.

Again, over-represented in this room, about 40% of households and nearly every second household in Australia has a dog.

Who are the cat owners? And you be a cat and a dog and another pet but the cat owners, be proud, I am a cat owner too and a dog owner.

Great, so that's about 27% of the Australian population has a cat and don't be ashamed there are many beautiful pets that if we have in our lives.

What about birds and fish, hands up.

That's probably almost representative, about 10% and then there are all the other pets.

So if I mentioned a pet that someone has lots of joy of in their lives that I haven't mentioned, there's many of them, reptiles are still quite a popular pet as well, good.

Now I know what the rooms like and I mostly got a pet-friendly audience which is great and that's probably why you are here.

What I thought I would begin with is just a few minutes to tell you a little bit about me, Di has done a good intro but I suppose my interests, mostly around physical activity and health started pretty early and I did get into, initially in my Undergrad got into Engineering at UWA and quickly decided that wasn't the path I wanted and moved in to Science and I think by the second year I decided I wanted Major in Human Movement in Sport Science, so my first passion right up, is around physical activity and its promotion and looking at that more in a general community at a population level.

My husband says that I have never really left University, but I did, for a short spell, I stepped out into the field of Workplace Health Promotion and worked in Corporate Health for a couple of years and then found myself back, working in research and just really enjoying the research process.

But, still in that health promotion or prevention angle and ended up co-ordinating a big research trial at the Royal Perth Hospital University Department of Medicine and this was all about, "Through



Healthy Lifestyle Changes” so promoting more physical activity, healthy eating, reducing alcohol consumption and quitting smoking, the usual. It was about helping people to come off their blood pressure medication in a very safe and controlled environment.

It was a very successful trial, however, there was a real challenge in maintaining those lifestyle changes which we all know is a challenge in different parts and stages of our lives.

I then thought, a new position came up at the School of Population and Global Health at UWA and this again, was about promoting healthy lifestyles but looking at where we live and the urban environments that we are in and how that impacts on our health and what was really interesting about this research and I enjoyed it so much, I did my PhD in it and I stayed around for the full twelve years that it ran.

What was really interesting about this study, is it evaluated our Western Australian Dept of Planning – Liveable Neighbourhood Guidelines and not many people know about them, but they are out there, they are not actually planning policy yet, even though our research did try and contribute the evidence base to get them across the line as policy but we do find that lots of developers do take on board some of these recommendations around building more health, liveable communities and our job was, what we call a natural experiment.

There was a whole host of people at the time, I am going to go backwards around 2002-2003 that were building homes all throughout the metropolitan area. These were all in these new developments, so mostly on the outskirts of the northern suburbs and southern suburbs and some out to the east and we followed those people over nearly a ten period to see what impact, living in these different developments, developed based on these liveable neighbourhood guidelines had on their health and wellbeing and I can tell you now, after twelve years of research, you can probably sum up in two sentences and that is that those developments that had more connected streets, it more access to shops and services, it had higher residential density, access to high quality, attractive parks were the places that people were walking, cycling more, using public transport and had this kind of general better community feel which we call, the term called “sense of community.

This project, which I haven’t mentioned the name of was called “RESIDE or Residential Environments Project” and internationally it was a leader of its time. A lot of international awards from it, millions of dollars in funding, and I think over the time, there are still publications coming out but well over a hundred publications from that work and that’s probably many an early career researcher, including myself.

But, I was involved originally to recruit the first two thousand people that took part in that study and along the way, a few stakeholders got interested in what we were doing and I am not sure how it happened but there was some connection with my supervisor at the time and another colleague doing some work with pets and, anyway, an advocacy organisation called Pet Care came on board and said we would put like to put up a PhD Scholarship and if anyone is interested, we would like someone to look at the health benefits as part of this bigger RESIDE Project.

At the time, I was in my 20s and I thought, I don't want to do a PhD, that's a big chunk of my life and I thought again, if I going to do PhD, this is a pretty good topic. PhD's are hard but this could be fun.

So a few years later I had my PhD and the title of it was "The Relationship between Dog Ownership and Physical Activity."

That was about fifteen years ago, so my love of how dogs and pets, in general, can promote our health, especially to be more active, have been a big part of my life. As a result of that work, we did some pretty cool stuff. I will come back to what we did in a moment, but we, we set the evidence base, providing high-quality research because, I think we all generally and I know I get asked this all the time, "We know pets are good for our health, right? So why do you get paid to do this research?"

Well, I think it's about providing much higher quality evidence so we make sure that pets don't disappear from our lives and there are certainly a lot more challenges in our urban environment these days to make sure we keep them part of our lives.

But that work led to me having this name when I attended conferences and was out and about with other academics and I was referred to as the "Dog Lady". Maybe, it wasn't so comfortable and I thought that wasn't too cool for a while and I tried to get away from it, but in the end, it ended up being a really good thing. I have continued on my research in pets and particularly dogs and physical activity right through my career to the current point.

It's gone down the life course, so my PhD, we did adults then it's moved to school-aged children and now we focus on the early years, I am going in the opposite. I [inaudible 09:42] the life course.

Certainly, the health benefits of pets is a passion of my research and it is still a good chunk of what I do and of course, personally, it is a real passion of mine as well.

I had to go without a dog for a couple of years as my children were growing up and it just wasn't feasible for me to bring up a third child, even though they grow up quite quickly, but we recently, a couple of years ago we got a new dog back into our lives and I don't know what I was doing while I waited those years.

It was a tricky time with young children and balancing and life.

What I wanted to do tonight, is go through why we own pets and some of the reasons.

The talk is mostly about more of the details of what we know from the research around the health benefits and I will talk mostly about the benefits for adults but also for children.

I then wanted to be a little bit more realistic and say there are costs associated with having pets and give a broader view on that and then finish up with some of the things we need to be thinking about to make sure that we do continue to have pets in our lives.

So, pets have been ... well, let's focus on dogs ... I will talk about pets but I am really mostly talking about dogs.

Dogs have been part of human civilisation, there are many theories, but at least for tens of thousands of years and there is this idea that we co-domesticated together and it goes back to the hunter-gatherer time and really dogs at that time had a purpose, they were quite good for security and safety, they have obviously heightened senses around smell and hearing so that they served a purpose, but over time they became domesticated as we did and then just part of our everyday life.

In modern society, the levels of pet ownership haven't changed too much over time even with the challenges we have in some of our environments of late.

The main reasons, probably a "no brainer" here but the main reasons we have a pet is, number one, companionship and the I think it's someone like sixty to seventy per cent of us agree that that is the number one reasons.

Other reasons that come up as well is that we have them because we want to rescue them and that is something that is quite normal in our human nature.

Other reasons, is we have them as companions for other pets but also companions for other family members including children.

So, in households where there are children we get the highest rates of pet ownership, it's up to sixty or seventy per cent, much higher in families.

In families, if you have children, one of the key reasons and it was the same for my parents before I did any of this research, it teaches kids about a sense of responsibility. So, that's one of the key things.

Then there are other aspects related to pets being good for our relaxation. So, just the idea of thinking about fish, beautiful fish in a tank, there are studies showing and we have them in some of our universities, I think there is a push to try and get it to happen all the time at UWA and it has been tested that there are other universities in the Perth area where there is a dog that comes in at exam time and this is mostly done in universities and we would love to see it in schools as well, especially when [inaudible 12:50] comes around.

But yes, a dog can just simply be in the area and as students walk into their exam, its completely optional, but just the simple act of patting that dog can really lower the stress and the nerves and so one.

They are some of the reasons that we have pets, as I said the rates and levels of pet ownership haven't changed too much over time.

Why do we need more evidence?

Why do I need to do this research?



Why do I have a job, why do I get paid to do this?

Probably over the last three decades, there has been lots of little studies, things were done to show that pets are good for our health.

The real problem is that these studies are what we term “not scientifically vigorous enough”. So, some of the work that we contributed to initially was to include studies where there were lots of people so that it just wasn’t by chance that we were finding these benefits.

We made sure that we had really strong methods that were repeatable. That’s really important in science and made sure that we developed tools that others could use. As part of my PhD, I developed a tool called the “Dapper Tool”, Dogs and Physical Activity Tool, it’s been requested and used by other researchers and the number is over two hundred people, academics have asked to use this tool, we have had a [inaudible 14:10] others have translated into ten different languages, so it was the first real instrument in the field that could measure, not just the amount of dog walking that was going on and its contribution to people physical activity and health, but all the factors that may influence that as well.

There are some of the contributions that we have made and the types of research that we have aimed to do and as I said earlier our research has really been at that community population level.

We have looked at sub-groups like adults and children but really trying to see those benefits at a broader population level.

I suppose one of the challenges that we have been faced with, even when we have written a really good paper and a journal editor says, “Well written paper, good job” it still comes with, “but there’s a titer factor”.

There’s a little bit of ... “it’s really good but dogs, pets, health” ... so that has been a challenge for us as academics to make sure that we do really high-quality research and we get it published in those high impact journals and that we remove the “titer factor” as much as we can.

This has really come, I suppose, probably in the last two weeks, I think ... I don’t know ... maybe I don’t need a job now because someone has done it so much better than we ever had.

This was a couple of papers that were published in, probably the number one ranked journal in cardiac health, it’s called circulation and there was a paper published there, 180,000 Swedish people, so it was a big national survey, proven evidence that if a person was a pet owner and they had a heart attack, their survival rate, post-heart attack was much better than someone that didn’t have a pet.

It wasn’t the same group, but in the same journals within the same couple of weeks, another study, they combined the data from ten big studies, 3.8 million people and shown ... I quit, I quit, I don’t need to do any more work ... it was just in adults though ... showing that in 3.8 million people, let’s



say globally, unequivocal evidence to show that people who had pets were less likely to die, they had a longer life, so there you go, I can probably finish right there, but that was just in adults.

Coming back to this whole “titer factor” and the research and providing high-quality evidence, regardless of those two fantastic studies that have just come out, there has been a little bit of mucking around with academics in the field and I am going to have to do on some people and they are very Senior Professors, one of them is based in Perth.

One of the best studies that was published in 2001 looked at the epidemiology of dog walking and this is one of my now good colleagues and he published in again, another good journal, The Medical Journal of Australia and he published with his dog as co-author, Russell J Schroeder. I kid you not if you need evidence, I am very happy to provide it but on the other side of things, we also have some very senior academics that, are maybe using dogs to their favour to show up journals and editors.

In the world of academia, there is quite a lot of dodgy journals around and they are also dodgy because they get certain people in, say, younger academics, but they get you in because you need to pay a fee but they will pretty much just publish anything and you don't want that and they are very low impact and that's not good for your track record.

There is academic, a Senior Professor in Perth, well known, done amazing work in Public Health and Advocacy who has a special account set up with one of his colleagues who is Dr Olivia Doll. Has anybody heard of this Twitter account? No? Okay, start searching but ... so Dr Olivia Doll is a well-known academic in Perth, a Senior Lecturer, I believe, at the Subiaco School of Veterinary Sciences ... yes we all know his name [laughing] train of thought here ... I think she has published a couple of papers at least but has been invited onto several high-quality journals on the Editorial Board.

Just by the name of the institutions that I mentioned, this is not real, Dr Olivia Doll is actually a dog, a Staffy, I think, mostly Staffy called Ollie and is the dog of a well know Professor Mike Doyles, as I said very amazing work in advocacy and in the field of Public Health and he set this up, not to shame the field of research by any means but to shame the whole aspects of academia where these dodgy journals, trying to pry on people and don't do background checks.

There are no background checks at all and as you can see, this kind of thing can happen.

We sit on the other side of the high-quality evidence, none of that.

They are some of the things around the scientific rigour. There is lots of research over the last three decades to say there are physical benefits, there are psychological benefits, there are social benefits and these benefits to us as individuals of having pets but to the broader community.

Some of the work we have done has shown that people who have dogs, walk more, are more physically active, probably about 40 minutes extra per week than people that don't have dogs and adults that have dogs are more likely to meet the recommended physical activity recommendations which is 150 minutes of physical activity per week and a few years ago, we did a big study, we combined all the studies internationally, put them altogether and we saw that on average, a person



who had a dog, walked their dog 160 minutes per week. So if the recommended level of physical activity is 150 you can see why dog walkers meet that recommendation which is excellent.

There are lots of mental health benefits, so we have seen that people who have dogs have less feelings of stress, depression, less feelings of loneliness as well and there is more broader social benefits as well.

Some work, done with a colleague, Professor Lisa Wood at UWA also, we did a study where we had just under a thousand, I think, of participants in Perth, but we had three other cities in the States as well and we saw ... we were trying to understand one of those more broader, social benefits of having pets, and we saw that people who had pets had better social support.

They had better social support from people around them, in their neighbourhood and their community, but the main mechanism was through dog walking.

I have just been talking about walking and physical activity but there are all these social benefits as well.

There is this really good anecdote ... I have asked a few colleagues for some good stories to share with you tonight, most of them came back with the same variation of the one I am about to tell you and you are probably familiar with it if you are out and about and dog walking recently.

An example of ... when you go walking and you are out and about with a dog, they are like icebreakers, they are like babies, it's much easier to start a conversation. You go, "oh what sort of dog is that?" and then "oh, what's its name?" and then you talk about the weather and if you are going at those regular times you get to know the same kind of people and you build up what we call this, this social capital which holds our community ... the glue that holds our community together ... the sense of community.

And, so here is my little anecdote, a variation of the ones that are around.

There's a local group that used to meet, at roughly the same time each morning to take their dogs for a walk, they used to see each other all the time and they noticed one day that one of the ladies wasn't there, which was a bit strange, so they said, "oh, we will go check on her."

She was a little bit older and she had had an accident and had a fall.

She was okay, but the thing that was really stressing her and what she was worrying about is that fact that her dog was now, not get its walk and getting exercise and so one of the local owners, who was part of this dog walking group said, "no problem, we will keep walking your dog until you are back on your feet again" so lots of examples of how that works.

The other one that happens quite a bit I think is when you go on holidays. I think that's a really hard thing and shown to be a real barrier of having pets is that when we go away on holidays, who looks after your pets and quite often it is someone else that already has one or two dogs but takes yours as well.

They are some of the more broader benefits for adults.

We see the same health benefits when we think about kids. Again our research has shown the kids do far more physical activity, walking, more outdoor play when they have a dog, compared to when they don't. They are more likely to meet physical activity recommendations.

We also see with kids and I am talking more of this kind of ... eight to twelve age group which is really important for their development is that they start to have opportunities where there is low risk but they can start to develop their independence. It's what we call Independent Mobility. They get to start to move around, initially around their neighbourhood and then their roaming range gets a little bit bigger.

We have done research to show that kids parents tell us that when their kids have a dog, they are more likely to let them walk to the local shop, walk to their friends house, go to the park, so a bit like having an older sibling, the dog in a parents mindset provides a little bit more safety and I think that's really important when we think about, there definitely still is this social norm around the helicopter, bubble wrap generation, right?

Those parents that have dogs and are providing that little bit more independent mobility to kids, that's a really good opportunity.

We also see, and I think more of our work now focused on the early years, we see, not just health benefits of pets to children but a lot of developmental benefits and then starts early. We see that children who have pets, generally, it can help them to develop their empathy, apart from the benefits of teaching responsibilities through feeding and exercising. We know with some of the work we have done initially, is that kids that have dogs, again just talking in the general community, the children have been social and emotional development and the other thing about pets for kids is they teach kids about the life and death cycle and probably a bit different when you have got a fish compared to a dog but it does teach those important parts of our life and being.

Some of the work we are doing at the moment, which we think is pretty exciting and I want to be able to share with you tonight, is a project called PLAYCE PAWS. Our research program at UWA and Telethon Kids Institute, it's called PLAYCE and we are doing some work, it's called PLAYCE PAWS ... doing some work to see if we can encourage young children to play more with their pet outdoors, their dog and to encourage families to go on more family dog walks. And this is the younger kids, so its five to eight years and what we are doing is trying some really ... what should I say ... kind of top-level intervention or kind of minimal intervention where we encourage parents to provide more opportunities for their young children to play and to go on family dog walks.

One of our groups at the moment just received some simple text messages over four weeks ... and it could be as simple as, "Oh it's a beautiful day, Suns out, take Ben and your dog Jack for a walk." Really simple, I think three or four messages a week, not hassling parents in any means and then we have another group that get their SMS prompts and the kids also get more engaged because they



have a dog pedometer. Each time they play with the dog or they go for a walk, they have to click the pedometer onto the step counter onto the dog's collar.

We have done a lot of engineering and work to try and make these work on dog's collars and they also fill in a little diary to record the number of steps that their dog does.

Then, of course, we have the usual care or control group that continue what they are doing normally and at the end of the study, they get all their resources.

We are very excited about this work, our whole hypothesis is again that these health benefits, these developmental benefits of dogs is about the actual time children are interacting with them, so it is through that active play and the family dog walking, so watch this space, data and the work and the study that we are working on at the moment.

That's enough of the health benefits, I have got a time at the back there, so really briefly, I want to acknowledge that I talked in a very positive lens the whole time tonight and that's good but I want to acknowledge that there are costs of pet ownership and in particular focused on dogs.

There was a nice Report out in the last month, I think, showing that the average cost of a dog is about over \$2,000 per year and for the life of the dog it adds up to \$25,000.

Now most people that have pets just go, "oh, they give back so much more, it's nothing" but I am just out there that is one of the reasons, sometimes people can't have pets.

Secondly, I have to acknowledge that there are dog attacks and bites and they do happen and unfortunately, they are horrible and devastating when they happen and of course in modern times, social media and so on definitely can give it probably more attention. But again if we look at the epidemiological studies and the evidence, most dog attacks and bites happen to a dog that we know of and it generally always happens in our own yard or out in the front space. So, very few dog attacks and bites actually occur in public spaces, but they are still horrible when they occur.

Just really quickly, you all know it, this more at a community level, but if we can change social norms and I think we are pretty good in Australia, but of course, we use parks, there is the dog litter and there is the barking that can bother some people but I think all the benefits overall and generally outweigh any of the costs.

Lastly, to finish up, just some things to think to think about, going forward, I think we see that as we move forward, we are having the majority of people will be living in cities so we are seeing a lot of the population group, people move into cities and we are seeing changing urban environments. You probably heard of that old statement and it's been around for a while, "the loss of the Aussie back yard" right?

We are building bigger houses on smaller blocks so what is really important as we look forward to ensure that we keep pets part of our lives, is that we plan for them and that we have access to high-quality green spaces and parks around us.

That is something that we can advocate for and something that comes into State Planning at a Local Government level.

We have done research to show that dog owners are no different to any other person that uses a local park. We like high-quality parks but there are two simple things, two little bits of infrastructure that have to go in to accommodate dog owners, dog litter bags and bins and signage. Clear signage, for example, is it an on-leash or off-leash area and sometimes there are times associated with that.

We are pretty easy to cater for and of course, dog owners are also people that go the park with their kids, well why not?

They cross different user groups in that public open space.

What I really like to see more of, is I suppose policy reform and it's very exciting compared to some of the European countries who are a little bit behind but in the last year, I think, Victoria was first and I believe Queensland has done it or it's on the way.

There has been policy reform around people being able to have pets in rentals. That again is another big barrier as to why people don't have pets and there has been a change in those laws now to say that it is the right of a person moving into a rental, so the person who is doing the renting, to have a pet whereas before, it used to be the landlords right to say, "no pets".

There is some policy reform and some changes happening very slowly but positively.

Lastly, I just want you to think back ... I have talked a lot about the broader policy and physical environment but come back to you as individual pet owners, dog owners, or those people around you that you know and your family and your friends and we have proven, without a doubt the biggest thing that keeps us walking and physically active, is that dog!

Di said "walk" with other dogs it's a certain alarm going off at a certain time, it's that routine, it's the sneakers that you put on, it's the walk to grab the lead, they are so good for our motivation, we know from the research that it's the dog that provides that sense of responsibility or that obligation or that motivation to walk each day.

Once we get people walking with their dogs, it's the dog that keeps us doing it, which is fantastic.

What we are challenged with is up to ... we see up to about 40% of dog owners that don't walk their dog and it's our job as researchers to find out more about, how we get them going, but once we get them going, we know the dogs going to keep them walking and that's a good thing.

We see that people may not walk for their own health benefits but they will do it for their dogs so that's really important.

This is really important, we think more broadly about things like lifestyle, disease and we have increases in things like obesity, cancers, cardiovascular disease, diabetes and if we can do our bit

for improving physical activities through dog walking then that's good. That's almost every second person in the population so it could have some really big impact.

I am going to finish up by saying, I think that pets, in general, are fantastic companions, they are a big part of our lives, I would urge you, yourself or if you know other people who have a dog, encourage them to get walking, great for their health, great for the community and obviously for your pet as well, good for your dogs.

Their health status is paralleling ours. We have a pet obesity epidemic at the moment, so what we can do to help ourselves, pets and ourselves along through more physical activity and dog walking would be a wonderful thing.

I think I am going to finish up there and open the floor for questions or comments.

[clapping]

Diane Arnott

Thank you, Hayley, I hope you all enjoyed that and learned something and are going to go for a walk with your dog tonight and if not a walk with your dogs because you don't have one yet, you can go to the dogs home and get a dog.

Are there any questions? If you have a question, **you can just shout it** out or I can bring you the microphone, depending on how brave you are feeling.

** Microphone not taken to members of the audience so, therefore, questions were inaudible and not recorded and could therefore not be transcribed **

Audience

[inaudible 32:55]

Associate Professor Hayley Christian

Yes, and that's ... as is said that's the biggest challenge for many people, is what do you do when you go away on holidays.

Audience

[inaudible 33:03]

Associate Professor Hayley Christian

Yes, you pay for it.

I haven't personally done any research in that field. I think what's ... even if we talk about breeders, not just different kennels, categories, looking after our pets when we are away, I think there is still a lot of work to be done and I definitely see a lot of work that is trying to be pushed through, through



either a Local Government, different organisations in animal care to make sure that it is a more rigorous process and everyone is being kept in line and there is some follow up with that but ... it's a challenge, it's a horrible thing to leave them behind and you can't take them internationally.

Audience

[inaudible 33:58]

Associate Professor Hayley Christian

Yes, yes but I don't think some of those parts of the pet care industry are as regulated as we possibly may like. We will see if we can get someone to fund that one, [laughing]

Audience

[inaudible 34:22]

Associate Professor Hayley Christian

That's a really good question and that's one of the questions that I tried to understand and I thought, "well, why am I trying to advocate that we should do this much dog walking?" "We have got these physical activity recommendations for humans but what do the vets say?"

It was really hard to find any evidence or any information about how much walking or exercise dogs should get each day and of course, it depends on the breed and the temperament, all those sorts of things.

There was a "round about" figure that I saw and again it was ... I don't know if was the Australian Veterinary Association but it was a reputable organisation or association and I saw about an hour that they need exercise per day.

I suppose on the other side of that, we see ... and you have probably seen it yourself, is we see people down the park and the dogs are getting great exercise, because of those green, swingy throw things, we are not even getting any movements in our arms, we just ping the ball.

My flipside is for that, I hope every one of those dog owners walked to the park and walked home and I hope that when they are at the park and what they are doing, is they are maybe not contributing to their physical health but they are contributing to that sense of community and the social cap on the side of things.

If the human recommendations are 150 minutes per week and that's a minimum, it's about thirty minutes per day but depending on your dog breed and temperament, there is this rough number out there, don't quote me on it, I had to really search for it, about an hour per day.

Diane Arnott

My dog got ten hours a day!

Audience

[inaudible 36:01]

Associate Professor Hayley Christian

Good one.

There is some work being done with the Telethon Kids Institute around the Microbiome and things like that, which I have said “come on, we need to find out what about a pet's role here” so, watch that space that will be something nice that we can look at but I am thinking it's in Melbourne, the Murdoch Children's Institute. I think that's in the last year, they did publish quite a nice study to show that kids who were exposed to different allergens early on, including pets and that, was their key finding, had better immune systems.

We have also published a paper a few years ago, showing the kids that had pets in their house had lower chances of getting gastroenteritis, so yes, there is some evidence there.

Audience

[inaudible 37:10]

Associate Professor Hayley Christian

I wish my colleague Lisa Wood was here because she is the real advocate at UWA to get this happen.

Bring your dog to work day!

I think it is quite big in the US and obviously in the UK but it is really slow in taking off here. I don't know, I think it needs to be done in a workplace organisation by organisation level and then you get a groundswell and get it across the line.

I think when you have successful organisations that do it elsewhere, that can say, “this all works and it's all possible” so you have got good case studies to say it's all safe and that it has a whole lot of benefits.

I don't know, we just need to keep advocating for ... saying that it does work and people appreciate it.

I might add that I have done a lot of work over the last few weeks, very hectic with writing graphs and stuff and got into this routine where, when I work at night, my dog comes down, Lenny, and sits under my desk but I have been working that much that on the weekend I did not work and let the poor dog in and where did he go, hung out in the study under the desk by himself the whole time.

I was like, “I need you out here for my stress relief and fun times” and he was down in the study waiting for me to meet him down there. [laughing]

Audience

[inaudible 38:35]

Associate Professor Hayley Christian

Yes, and I think the thing we can take ... I think we can get our best guidance on how that works from places ... other countries where there is high density, so when you think about the UK, their levels of pet ownership are more like 40%, I think dogs are down to 25% v Australia 40% so I think a lot of that is to do with what that density looks like and it is harder for people to own pets in apartments and I think a lot of that relates to having that private space and that's when the whole access to parks and public open space becomes even more important, but it is possible. You look to probably Europe and other countries who have much more pet-friendly public transport, cafes, restaurants and things like that, we quite behind still in that regard.

But, it is all possible.

Generally, once we see as the density of living increases and the loss of private open space that pet ownership levels do decrease a bit.

It is about planning for pets in our future. We know that the populations are going to move to the city and we are going to have higher density so we need to start planning for that and I think that public open space is critical.

Audience

[inaudible 40:19]

Associate Professor Hayley Christian

No, because we take from our perspective, we take a population approach to human health and we take a population approach to dogs.

So, in our research we have asked for things to understand if they have an impact on peoples dog walking behaviour, for example, so if you ask, can they tell us what breed it is, can they tell us the size of their dog, we ask for levels of weight, overweight and obesity as well. None of those dog-related factors had a big impact.

There were some things that might have affected our ... not our dog walking behaviour but our intention to walk, so, for example, if we had a more ... an older dog or a dog that was unwell, those are some of the barriers to us to getting out and about.

I think the biggest thing about ... I don't think anyone has looked at differences between pedigrees and say, rescue. But what is difficult when we look at breeds, is that there are only one or two people, I think, in Western Australia, certain people that can certainly say that a certain dog is a particular breed.



There are blood tests and everything that has to be done.

We all think that we have got a something, something cross something, something but until that testing has been done and qualified, one or two people are allowed to decide what breed a certain dog is, we don't really know.

It would be interesting to see if there was a different ... but I suppose that comes down to if there are any issues with maybe, behaviour management being a barrier and we definitely know that in our research, again, it doesn't stop people dog walking, but it makes it a bit harder for you to initially get out there but having a dog that you know is aggressive in public, is still doable, people can do it and there are behaviour managers ... animal behaviour people that help, the same as we have psychologists that help us, there are animal behaviourists that do their work too with our pets.

Audience

[partially audible- no mic provided 42:24]

You mentioned that dogs were guiding parents so that their kids explore the world, is there any evidence of the differential effect on depression or anxiety and their value of the dog in their life, is that part of your research

Associate Professor Hayley Christian

I didn't mention this, but there is a lot of work that has been on service dogs, right? We traditionally think just guide dogs for the blind but there is so much now, seizure alert dogs apart from all the service dogs that work in the police unit and water control and those kinds of things but ... I didn't tell this anecdote ... but there is a child and his mum very keenly was happy for me to share this ... [inaudible 43:05] to ask this question.

Really quickly, one of the mums in our PLAYCE PAWS study let us know that she was so excited to be part of this study, they have got a dog recently, his name is Lenny, love it, the same name as my dog.

Their daughter has some behaviour issues with emotions, aggression and they didn't initially think to get the dog for that reason but can't believe the benefits of having this dog, so that whenever she is feeling like everything ... she is getting quite upset and it's all starting to get out of control, this dog just comes in and dissipates things and distracts her and the mum was saying that she finds it just stops her getting to that critical point and it can prevent the child having a "meltdown" in her own words and she is also finding ... so that's a prevention angle but there are benefits now that this little girl is now who probably didn't talk so much and wasn't comfortable talking to strangers, her conversation has really opened up.

She will start a conversation and say, "this is my dog Lenny and he is this breed and ..." so I am really seeing the communication opening up for other people and improving as well.

Audience

[inaudible 44:21]

Associate Professor Hayley Christian

Sorry, so if people have pets in apartments, are their dogs negatively impacted in terms of their health?

Audience

[inaudible 44:37]

Associate Professor Hayley Christian

I haven't seen any evidence and I am not for Australia, I would go to straight to European countries where apartments are much more common, there is higher density living.

I don't think so and the thing is, I suppose we do have a little bit of a misconception that we think the bigger the dog the more exercise it needs, well actually Great Danes are some of the laziest breeds you can get [laughing] so that's not always the way, but not to my knowledge but I could check it out.

Have you heard anything?

No?

Audience

[inaudible 45:11]

Associate Professor Hayley Christian

That's where having that public space is really important.

I think the benefits for companionship and that social interaction, that wouldn't change and maybe that would be better because you are in a smaller space, you have to hang out together in closer confinement, I don't know.

Audience

[inaudible 45:50]

Associate Professor Hayley Christian

I think you hit the nail on the head. I think it's making sure that they are more integrated to our day to day lives, I think that should happen naturally as our lifestyles do change and there are more changes in our urban environments.

We did some work a little while ago and I didn't mention this and it probably my most favourite, famous part of my work.



I had the honour of doing some work on a program called Pet Positives. It was funded by one of the large pet food companies in Australia. I was brought in to provide some evidence and I did that around the health benefits but this was all about looking at all those small wins where there is advocating Local Governments to make sure that they don't restrict dogs any further in green spaces, they don't close down more dog beaches, they allow cafes if they want to support dogs visiting that they allow those permits through and this is some work that had the, I suppose, advocate of the Bondi Vet. So that was work I got to do with Dr Chris Brown and we got to present, so this is a whole advocacy process and it wasn't just me just doing the research but it was all him, obviously, we got to present at Parliament House in Canberra and I did a similar presentation in Perth with Chris as well, so I think, just coming at those different angles to advocate ... we have got really good models on how pets are integrated into higher density modern living in European countries, we just need to make that mindset change and I think the recent wins in the policy reform around rentals, is incredible, I think that is fantastic and I know the research is, I think it is Sydney University that has been working in that space pushing for that for so long and that's just been in the last twelve months.

Audience

[inaudible 48:08]

Associate Professor Hayley Christian

Great suggestion, so part of my work because I did my PhD on that type of research, we worked a lot with urban planners and I was always waving the flag, going, "what about the dog owners, that's 50% of the community!"

I think ... I still work in a little bit of that space but more around with kids now.

I think ... I don't know ... there isn't anything there, but certainly, over the years when our researchers informed next drafts or revisions of these liveable neighbourhood guidelines, I have been advocating for ... I think dog owners just get put in under that ... when we think about parks as multiple user groups. They are just like the sporting groups that use that green space for a certain reason or different groups that use those spaces and I have really pushed the "dogs are an important user group" but no, it's not clear on a State level, I think at Local Government, there might be, but I think it's not probably the positive perception of pets, it's quite often about management and barking and dog control and things like that.

But part of my PhD I did go out to several, I think it might have been eight or so Local Government authorities and speak to the Community Development Office, a Local Elected Member, if I could, parks people, obviously the Rangers and overall there were pretty positive perceptions of dogs in the community and most Councils were in agreement that most dog owners did the right things and if one or two didn't do the right thing that they were pretty good at getting onto those dog owners to pick up after their dog for example.

I think there is generally positive perceptions and benefits and understanding of the benefits of dogs and pets in our community in Local Councils but there is probably more that we could be doing.

Audience

Can I ask you a question?

I am interested in activity with dogs because the intensity is not all [inaudible 50:19] around a walk.

I used to own a male dog who thought he was the boss of everything, so this is our walk ... stop and pee ... stop and pee ... [laughing] so there wasn't a lot of intensity there, so has of the research looked into that kind of thing?

Associate Professor Hayley Christian

We haven't ourselves but I have had a number of other colleagues over the years that have ... well, I will tell you about the one colleague that has done it on the dog and the human and the owner ... but have provided what we call a measure of physical activity.

You mentioned earlier, these superhero belts are basically a device that can, a bit like a pedometer but a high tech pedometer, measure physical activity and these accelerometers can measure the intensity of activity, so whether it's light, its more moderate or vigorous intensity and measure those breaks or those pee stops as well.

I think it might have been a UK study, there have definitely been a couple of American studies and they have used these objective measures of physical activity and shown still, that dog owners are far more physically active than non-owners, so, even ... there are probably some different types of dog walkers that we haven't characterised yet because the other version is the dog that's quite young and you have probably gone into far beyond brisk walking and almost a run, so there are different types of dog walking.

The other side of that is that one of my UK colleagues Cary Wesker has also done some studies with owners wearing accelerometers and she managed work some "harness gadgety things" and put the accelerometers on the dogs as well and look at the physical activity of the owner and the dog at the same time.

That was only ... [inaudible 52:02] dogs in that study. A little bit of work has been done.

Audience

[inaudible 52:25]

Associate Professor Hayley Christian

I suppose our researchers are really, most focused on dogs as companion animals and I would have to say mostly characterised in our urban environment and our cities.

But, yes dogs have different roles and there are working dogs on farms and there are sometimes different rules that they do stay outside all the time but they still have quite a close relationship and bond and companionship between those animals.

Yes, you are right, even outside of Australia, you mentioned remote Indigenous communities they have a different role to play or relationship with us and we look to other countries, developing countries again, different relationships as well ... and then you look to countries where there are limits on how many children you can have and then you see the handbag dogs and things like that, so yes, you are right, they play ... they can play quite varied roles, depending on our cultural background and where we live.

Diane Arnott

We have got time for a couple of last questions if there is anything burning out there that you feel the need to say?

Audience

[inaudible 53:47]

Audience

[inaudible 53:47]

[laughing]

[inaudible 54:04] my colleague Cary, here, because she has done epidemiology, from the veterinary side of things so I am going say straight up, I am not qualified to answer this question but I suppose like humans there are ... we do have ... there are genetic predispositions but it is not just about that, it is about the environment that we are in and I suppose, rescue dogs are the best example of how certain dogs can be rehomed but sometimes their behaviour and what they have been exposed to in their early life just makes that impossible but it is ... there is some genes to it but a lot of the time ... sorry, think about kids as well ... it is that environment that can have a big impact ... and then there are, as I said animal behaviours, there are support services and people around and advice on the internet that you can get to support you with those things.

But I am not qualified to properly answer that one.

Audience

[inaudible 53:47 – 55:39]

Associate Professor Hayley Christian

No I haven't and I wish Dr Chris was standing next to me, but no I haven't but I will answer it from my own personal perspective [inaudible 55:45]



I think, like I said my stress levels have been kind of through the roof the last few weeks and from me personally, just the fact that the dog was under my desk, the way lies, he goes in and he parks under and its quite difficult because he brings his nose out and I quite often stand up and sit down but my foot is right near his nose but it's his way to nudge me and I swear and am getting really angry about something that I am doing and this little wet nose comes over to my foot but unfortunately, every now and again, I kick him in the nose so it's not ideal.

I am aware of some research showing that obviously dogs and pets pick up on our emotions and ... another example, my husband and I are having a bit of a heated discussion about something and the dog kind of disappears out to hide, he doesn't want to be part of that, there's raised voices. On the other side kids are running around the house having a ball, the dogs in chasing them as well, they definitely pick up on our emotions but they can also help us with our emotions and calming ourselves or getting ourselves excited.

Motivated!

Diane Arnott

Alright, we have reached the half-past-six point so I would like to thank you all for coming along, if you have any questions you would still like to ask Hayley, please do stick around, are you happy to stick around for a little bit longer? She may have a glass of wine in her hand but that's fully acceptable.

Thank you for coming and please join me in thanking Hayley.

[clapping]

Our next talk is at 7:00 pm so if you have got a ticket for that, please feel free to stick around, have a drink.