What effect do pets have on children's development and health?

This briefing accompanies the first in a series of reflective workshops organised by caar at the University of Edinburgh and funded by the Economic and Social Research Council (ESRC). It focuses on findings that emerged from two of our research projects, in which we examined how children describe their interactions with pets and how attachment is linked to various indicators of well-being in children/adolescents aged 11 to 15 years.

Background

Children often describe the pet animals that live with them as their ‘best friend’ or a member of their family (Muldoon et al., 2015), with recent research suggesting that children can even feel closer to their pet than their siblings (Cassels et al., 2017). However, the significance and effects of this relationship continue to be debated as a result of varied findings (Purewal et al., 2017). Mueller (2014) argues that we need to move beyond looking at interactions with animals vs. no interactions, and explore the qualities of the relationships and specific features of various animal experiences that may be associated with promoting positive development.

Our studies

The studies discussed in this paper were developed within two projects funded by the UK Government Department for Environment, Food & Rural Affairs (Defra).

Project 1: Duty of Care to Animals among Children (2008-2012)
- Qualitative research with children (Focus Groups)
- Development of Short Attachment to Pets Measure (SAPS)

Project 2: Duty of Care to Animals among Adolescents (2012-2017)
- Incorporation of SAPS and pet ownership questions into the 2010 Health Behaviour in School-aged Children (HBSC) study to examine links between pet attachment and measures of child/adolescent health

The research undertaken within Project 1 was used to develop questions for use in Project 2. HBSC is a cross-national survey of 11, 13 and 15 year-olds and is used by governments and policy makers to guide health policy (Currie et al., 2011).

Key findings

Our analyses of SAPS and HBSC data have revealed the following:

(a) Strong attachment to pets has a positive influence on children’s social and emotional wellbeing.
(b) Attachment to pets appears to weaken with age, as children move into adolescence.
(c) Girls consistently report stronger attachment to pets than boys, and emotional support aspects of the relationship are more salient to girls.
(d) As children get older, attachments to pet dogs do not seem to weaken as much as bonds with other pet animals.
(e) Boys’ and girls’ relationships with dogs appear similar over time. However, there is variation in boys’ and girls’ attachments to cats and small mammals.
The links between strong attachment to pets and child/adolescent wellbeing

In our initial analyses, we found that strong attachment to pets (using the SAPS measure) was associated with better quality of life and mental well-being (Marsa-Sambola et al., 2016), as well as better communication with parents and best friends (Marsa-Sambola et al., 2017). However, our subsequent analyses found that social and emotional benefits are not associated with every type of pet (Muldoon et al., in press). Table 1 shows that those strongly attached to their dog/s had higher scores than those who were not strongly attached on a wide range of wellbeing measures. There were also benefits for those strongly attached to their small mammal/s. However, there were no benefits associated with having a strong bond with fish/reptiles or amphibians, and among children with cats, those strongly attached were more likely to feel left out than those who did not have such a strong bond (shown by the x in the table).

Table 1: Significant differences between children who were strongly attached vs. not strongly attached to different types of pet

<table>
<thead>
<tr>
<th>Measure</th>
<th>Dog/s</th>
<th>Small mammal/s</th>
<th>Cat/s</th>
<th>Fish, reptile, or amphibian/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life satisfaction</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kidscreen mental health index</td>
<td>✓</td>
<td>✓</td>
<td></td>
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<tr>
<td>General Health Questionnaire</td>
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<tr>
<td>Confidence</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Happiness (frequency)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Happiness (extent)</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Perceived health</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling left out</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Feeling lonely</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of communication (with father)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ease of communication (with mother)</td>
<td></td>
<td></td>
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</tbody>
</table>

* For details on the measures used, please see Currie et al. (2011).

Developmental trends

We have also identified a general weakening of attachment to pets with age; with girls consistently demonstrating stronger attachment than boys (Figures 1 and 2). Yet, in spite of declines with age, relationships with dogs appear to be similar for boys and girls, unlike relationships with other pets. Emotional support aspects of attachment, such as feeling the pet understands the child, and feeling lonely without them, appear more salient to girls (Muldoon et al., under review).

Figure 1: Boys’ attachment to different types of pet

Figure 2: Girls’ attachment to different types of pet
What do these findings mean?
Our findings highlight the significance of pet animals in children’s lives. Yet, not all children either connect with an animal, or benefit from their interactions with pets. Children with animal-related phobias or allergies may find interactions challenging. Additionally, children who have observed animal abuse or cruelty may pose a risk to animals.

Potential psychological mechanisms for ‘pet effects’ remain unresolved and are a focus of international research efforts. Such mechanisms include social facilitation, attachment, anxiety and stress reduction, increased physical activity, and underlying physiological processes.

It may be helpful to reflect upon the potential benefits of positive interactions with animals for children, and to consider how we might capitalise on this part of children’s everyday lives to support their health and development.

References

Acknowledgments
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Contact
Please contact Dr Janine Muldoon janine.muldoon@ed.ac.uk for further information about this briefing paper or our series of reflective workshops taking place in 2018.

We are currently updating our website. Do let us know if there is anything you would like to access there. https://www.ed.ac.uk/health/research/cadp/children-adolescents-and-animals-research

Social media
Connect with us on Facebook or Twitter. We provide updates on our work on these pages, as well as details of our forthcoming workshops, which will also be advertised through Eventbrite.

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