To what extent do therapy dogs influence children's social emotional mental health (SEMH) in schools?

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Abstract

Currently, there is an alarming increase in children experiencing social emotional mental health (SEMH) difficulties in the United Kingdom (UK) that must be addressed to enable children to thrive. One approach that is rising in popularity to address this crisis is using therapy dogs in school to improve children's SEMH. Therefore, it is essential to determine the extent to which therapy dogs influence children's SEMH before using therapy dogs is widely recommended. There appears to be emerging evidence that therapy dogs influence children's SEMH to a large extent as they impact a range of SEMH outcomes in various populations. However, the evidence base is small and caveated with several significant methodological limitations and disjointed theoretical underpinnings. Therefore, further higher quality research is needed to rigorously investigate therapy dogs' influence on children's SEMH before they are implemented in schools. Ethical considerations are raised that therapy dogs in schools may threaten the safeguarding of children and animal welfare. Subsequently, educational psychologists' (EPs) role in advising schools on therapy dogs is highlighted and the possibility for EPs to contribute to the evidence base and lobby for clear legislation and policy for therapy dogs in schools is considered.

To what extent do therapy dogs influence children's social emotional mental health (SEMH) in schools?

Currently, there is an alarming increase in children experiencing social emotional mental health (SEMH) difficulties in the United Kingdom (UK) that must be addressed to enable children to thrive (NHS, 2023; Place2Be, 2023). SEMH encompasses an individual's ability to manage social relationships, emotions, mental health, and thus overall well-being (Frederickson & Cline, 2015). The Local Government Association (2024) reported that one in six children aged between seven and sixteen years old are experiencing SEMH difficulties, and whilst the demand for access to support has increased, the funding has stagnated. Therefore, schools have become opportune places to provide SEMH support, given the amount of time children spend there and schools' statutory requirements to promote children's SEMH (Baird et al., 2022; Department for Education (DfE), 2023, 2024). One approach rising in popularity is the use of therapy dogs in school (Baird et al., 2022; Wintermantel et al., 2024). For example, in UK schools, therapy dogs have been present during reading interventions, SEMH support sessions and in the classroom, and have assisted children into school (Coughlan, 2019; Crowter & Smits, 2022; Rothwell-Scott, 2022).

Although therapy dog owners must adhere to the Animal Welfare Act (2006), no one organisation provides certification for therapy dogs, nor is a specific licence required (BPS, 2020; Rothwell-Scott, 2022). Therefore, there may be significant variation in training requirements to become a 'certified' therapy dog (Baird et al., 2022, 2023). Additionally, The DfE does not provide guidance regarding therapy dogs in schools or collect information on which schools use therapy dogs or how (Rothwell-Scott, 2022). Subsequently, therapy dogs can be certified, but they may have received different training and thus have varying skills to cope with different environments and populations (Baird et al., 2023; Rothwell-Scott, 2022).

Therapy Dogs' Influence on Children's SEMH

Several studies report that therapy dogs positively influence children's SEMH in primary schools (Baird et al., 2022; Brelsford et al., 2017; Wintermantel et al., 2024). For example, Hergovich et al. (2002) investigated the effects of a dog in the classroom on 46 children aged six to seven in Vienna from diverse cultures (split into two classes). One class was a control group, whilst in the other class, a teacher's dog was present for the entire school day for three months. Comparing teacher's assessments pre and post intervention between groups, it was found that after three months children in the experimental group demonstrated higher social integration and greater empathy, and there were fewer aggressive behaviours. However, the authors recognise that they relied on teachers' views, did not randomly allocate the children and that an experimental period longer than three months is preferable to confirm their results. Nevertheless, Kotrschal and Ortbauer (2003) recruited some of the same children (24) to further investigate the effect of a dog in the classroom using a repeated measures design (one month without a dog, followed by one month with a dog). They videotaped the children for two hours weekly and coded observable behaviours. They found the classroom became more socially homogenous due to decreased behavioural extremes of aggressiveness and hyperactivity. Additionally, formerly withdrawn children became more socially integrated (Kotrschal & Ortbauer, 2003).

Tissen et al. (2007) investigated whether using dogs in school-based social skills training is significantly better than programmes without dogs. They randomly assigned 230 children aged seven to 10 years old to groups (social training without dogs, social training with dogs or dog attendance without social training). Based on pre and post intervention data over 10 weeks, social skills training with dogs led to a significant reduction in children's open (behaviour that harms other people physically or threatens harm) and relational aggression (damage to social relationships) compared to the other groups. Therefore, the presence of a dog in a classroom or involvement in targeted social training can influence primary school children's SEMH by improving their ability to manage social relationships.

Additionally, there is research to suggest that therapy dogs influence children's SEMH in a range of populations, such as children in secondary school, special education provisions, and children with specific diagnoses (Becker et al., 2017; Beetz et al., 2011, 2012; Hamama et al., 2011; Meixner & Kotrschal, 2022; Schuck et al., 2018; Zents et al., 2017). Zents et al. (2017) administered a questionnaire to 196 secondary students and 105 school staff to capture their views on the effectiveness of therapy dogs in promoting SEMH (in four schools that had a dog present two to three days a week). The researchers also conducted semi-structured interviews with 35 students and six staff members. Students reported feeling unconditional love and nonjudgement from the dog, a calming effect and reduced anxiety. School staff echoed students' views that therapy dogs effectively promoted students' SEMH, particularly for those with anxiety and low self-esteem.

Within special educational provisions, Anderson and Olson (2006) found school staff reported the presence of a dog improved pupils' emotional stability by preventing and de-escalating episodes of 'emotional crisis' based on tracking patterns of behaviours. Moreover, with children with specific needs or diagnoses, such as Attention Deficit Hyperactivity Disorder, Autism or insecure attachment, it has been found that therapy dogs can influence perceived self-esteem, response to stress, and sense of isolation (Beetz et al., 2011, 2012; Hamama et al., 2011; Schuck et al., 2018). This suggests that therapy dogs can positively influence several aspects of children's SEMH in a range of populations.

In consideration of UK-based research, there are indications that therapy dogs positively influence children's SEMH in school (Hill, 2020; Rothwell-Scott, 2022; Williams, 2017). Rothwell-Scott's (2022) thesis explored how dogs are being used in schools (five primary and one secondary) in England and Wales and found that dogs influence a range of SEMH outcomes. For example, school staff reported that dogs help facilitate and strengthen relationships between school staff and pupils by providing more opportunities for social interactions, particularly with senior staff members. Additionally, it was suggested that pupils' friendships and peer relationships improved. Furthermore,

participants reported that including dogs in interventions made pupils more comfortable discussing sensitive topics or feeling less judged. In general, it was felt that dogs created a more school-wide calming environment and increased attendance by accompanying children onto the site or providing motivation to attend when the dog is present. Baines et al. (2023) highlighted similar themes by gaining views from seven mainstream school parents in the UK. The parents felt that a school dog supported their child's social communication and management of emotions and improved attendance and engagement. Similarly, Barber and Proops (2019) found that UK secondary school pupils reported experiencing more positive emotions when reading to a dog than when reading to a teacher.

Notwithstanding the research discussed above, Baird et al. (2022) state that they identified ten studies where teachers and children had reported no perceived improvements in SEMH from therapy dogs. Therefore, not all the research indicates an extensive or positive impact. Nevertheless, Baird et al. (2022) do not clearly signpost which studies they are referring to and attribute these inconsistent findings to methodological limitations.

Methodological Limitations

Several systematic literature reviews have highlighted methodological limitations within the small evidence base supporting therapy dogs in schools and the need for higher quality research before therapy dogs are implemented in educational settings (Baird et al., 2022; Brelsford et al., 2017; Hall et al., 2016; Reilly et al., 2020; Wintermantel et al., 2024). For instance, Rothwell-Scott (2022) notes that much of the research has small sample sizes (e.g., ranging from four to no more than 50 participants) and no control group. Other researchers (e.g., Brelsford et al., 2017; Hall et al., 2016; Hergovich et al., 2002) highlight that even when there are control groups, children are often not randomly allocated to groups, and experimenters are not blind to their allocation, influencing internal validity.

Much of the research does not account for confounding variables (Baird et al., 2022), such as children's attitudes towards dogs or dog ownership at home. This could skew findings if only children with dogs at home benefit from therapy dogs at school or vice versa. Another confounding variable is the use of different dogs within and across studies, where some dogs may have more or less influence on children's SEMH (e.g., for the sake of animal welfare, Tissen et al. (2007) used ten different dogs in one study). Another confounding variable often overlooked is the presence of the dog owner (Reilly et al., 2020; Tissen et al., 2007). The owner could also influence the children's SEMH, and whilst the owner and dog cannot be separated to isolate the owner's influence, it would be helpful to know their characteristics when comparing studies (e.g., owner's gender, age, whether they directly interacted with children and whether they are school staff known to the children or a charity volunteer).

It is also notable that a large proportion of the evidence base is from studies with a focus on therapy dogs' influence on reading interventions and cognitive outcomes rather than SEMH (Henderson et al., 2020; Kirnan et al., 2016; Schretzmayer et al., 2017; Sorin et al., 2015). Therefore, the reporting of the SEMH outcomes often appears to be an afterthought, based on teachers' perceptions rather than carefully selected valid standardised measures (Baird et al., 2022; Brelsford et al., 2017; Hall et al., 2016; Wintermantel et al., 2024). For example, Kirnan et al. (2016) are frequently cited as providing evidence of therapy dogs' positive influence on children's SEMH due to their large sample size of 169 children (from kindergarten to fourth grade). However, the finding that children's confidence and self-esteem were increased from reading to a dog was based on interview comments from nine out of twelve staff members. Whilst this is insightful qualitative data for those participants, these findings cannot be generalised to inform implementation in all schools because there is no operationalisation of self-esteem or confidence. Ultimately, SEMH outcomes do not appear to be rigorously investigated within much of the evidence base.

Furthermore, there are notable variations in how studies were conducted, making comparison and synthesis of the evidence base challenging. For example, many studies differ in how they define terms and vary in SEMH measures (e.g., anxiety, social integration, self-esteem) and how they are measured, interventions (type, frequency, duration), population, sample size,, and educational setting (Baird et al., 2022; Brelsford et al., 2017; Wintermantel et al., 2024). Moreover, there is substantial variation in how much detail is provided about the dogs, such as age, gender, breed, certification, training and experience and how dogs were involved in interventions (e.g., present for a few hours, several days a week or consistently throughout the week). This impedes the ability to assess what characteristics of dogs influence children's SEMH and understand how long dogs need to be present to make an impact (Reilly et al., 2020; Wintermantel et al., 2024). Therefore, it is unclear for whom and under what circumstances therapy dogs are most helpful and how best to implement them (Baird et al., 2022). Future research must investigate the influence of therapy dogs on children's SEMH in schools more rigorously to improve the quality of the evidence base. Hall et al. (2016) suggested conducting large-scale randomised control trials to establish (with more certainty) if therapy dogs influence children's SEMH and to measure the longitudinal durability of findings.

Theoretical Underpinnings

The literature around therapy dogs in schools has highlighted some possible theories as to why therapy dogs would positively influence children's SEMH. A popular theory applied is Bowlby's (1969) attachment theory, where researchers have hypothesised that children form an attachment with the dog, and the dog can sense and respond to children's feelings and emotions in a non-judgemental and calm way (Gu & Wright, 2023; Jalongo, 2018; Rothwell-Scott, 2022). This reduces stress and supports emotion regulation in school (Gu & Wright, 2023; Jalongo, 2018; Rothwell-Scott, 2022). However, Williams (2017) and Crawford et al. (2006) noted that it is challenging to determine whether children have developed attachments with a dog, and the term attachment is often casually applied to human-animal relationships to describe a different type of emotional bond. Wintermantel

et al. (2024) have proposed an adapted biopsychosocial framework to try to offer a more holistic model of how therapy dogs influence children's SEMH by considering the psychological (e.g., personality), physiological (e.g., hormones) and social (e.g., relationships) elements of wellbeing. Nevertheless, the literature feels disjointed in the theoretical underpinnings of why therapy dogs would influence children's SEMH in school specifically, which is an important component in informing the implementation of therapy dogs in schools and maximising the potential benefits. Therefore, future research should also endeavour to understand and consolidate the mechanisms and theoretical underpinnings of why and how therapy dogs influence children's SEMH.

Ethical Considerations

When considering the influence of therapy dogs on children's SEMH in school, it is essential to assess whether therapy dogs can cause any harm or distress for children and if any negative impacts outweigh potential benefits. For example, some children may have allergies that dogs trigger, negatively impacting their health (Baird et al., 2022; Jalongo et al., 2004). Other children could have an intense fear of dogs and, therefore, not feel safe at school (Baird et al., 2022; Jalongo et al., 2004). In some cultures (e.g., in the Middle East and Southeast Asia), dogs are considered unhygienic, which could distress some children (Jalongo et al., 2004). The highest concern is the possibility of a dog bite. The Dogs Trust (2021) highlighted that dogs typically find busy, noisy, and unpredictable places (much like a school) stressful. Environmental and social stress can lead to increased irritability and anxiety in a dog, which is when a dog bite is most likely to occur (Dogs Trust, 2021). The concern about dog bite occurrence is exacerbated by unregulated training requirements for therapy dogs and owners to become 'certified' (Baird et al., 2022; 2023; BPS, 2020). This emphasises a worrying question of how schools can be sure that their therapy dog will never cause injury to children.

Moreover, even if there were a rigorous and extensive evidence base that therapy dogs influence children's SEMH to a large extent, the dogs' welfare should take precedence. The Dogs

Trust (2021) stated that the use of dogs in schools is an "inadvisable initiative" (p.1) as they believe it is unlikely that dogs will actively enjoy the environment, given dogs' known preferences for predictability and consistency. Furthermore, the Dogs Trust (2021) highlight the lack of research to indicate that dogs enjoy school environments, therefore it is not ethically acceptable to make them simply tolerate being in a school. The British Psychological Society also recognises therapeutic interactions with children as demanding and tiring for animals (BPS, 2020). Whilst some research has aimed to investigate dogs' welfare during therapy sessions by measuring heart rate, salivary cortisol, oxytocin, ear temperatures and behavioural observations, there are often mixed results and they have not been explicitly tested in school environments with a range of child populations (Clark et al., 2020; Glenk et al., 2013; Glenk & Foltin, 2021). Therefore, it may be unethical to use therapy dogs to improve children's SEMH in school if it is at the expense of the dogs' welfare.

Implications for EP Practice

There are implications for EPs' practice regarding the quality of research, theoretical underpinnings and ethics of using therapy dogs in school. EPs can significantly impact schools through their advice on evidence-based interventions, staff training and school policies (Boyle & Kelly, 2017). Therefore, EPs must highlight to schools that while there is positive emerging evidence to support using therapy dogs, higher quality research is needed to understand further therapy dogs' influence on children's SEMH. As Katcher (2000) stresses, just because being around animals is enjoyable for some does not mean it is an effective therapeutic intervention (as cited in Williams, 2017). This is important for EPs to uphold their standards of proficiency (as dictated by the Health and Care Professions Council; HCPC, 2024), as EPs must critically evaluate research and use evidence-based interventions. Additionally, EPs can emphasise the potential risks to children and advocate for animal welfare, which is strongly encouraged by the BPS (BPS, 2020). Whilst the use of therapy dogs in schools is further researched, EPs can signpost schools to more established evidence-based

interventions to support SEMH (e.g., nurture groups; Sanders, 2007), charities, and highlight their local authority offers (e.g., individual casework and staff training).

Additionally, EPs can actively contribute to the evidence base of using therapy dogs in schools (Hill, 2020; Rothwell-Scott, 2022). Through questionnaires and interviews, EPs can gather information on the number of schools with therapy dogs and how they are being used in UK schools. Furthermore, EPs can lobby for clear legislation and policies for therapy dogs in schools, as Swinson (2023) suggested that historically EPs have had a noticeable influence on government policy. This will help ensure consistent safeguarding of children and animal welfare is upheld.

Conclusion

In conclusion, more research of higher quality is needed to confidently suggest that therapy dogs influence children's SEMH in schools and recommend their implementation. There is emerging evidence indicating therapy dogs influence a range of SEMH outcomes for children (e.g., aggression, social integration, self-esteem, confidence) in a range of populations (e.g., primary and secondary school children and children in specialist provisions; Baird et al., 2022; Wintermantel et al., 2024). However, across what is a small evidence base, there are several methodological limitations. Further research is also needed to investigate the theoretical underpinnings of why and how therapy dogs influence children's SEMH.

In addition, whether therapy dogs should be used in schools, regardless of their influence on children's SEMH, is brought into contention when considering it may threaten the safeguarding of children and animal welfare. Despite therapy dogs' rising popularity in UK schools, they may not be the optimum option to address the increasing number of children experiencing SEMH difficulties. EPs have a role in highlighting to schools both the need for more quality research before implementing therapy dogs as well as signposting to other effective evidence-based interventions.

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