

The Effects of Human-Animal Interactions in the Classroom

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Introduction

A traditional K-12 classroom in the state of Florida may contain 20-25 students and a single teacher. ESE and ESOL paraprofessionals may arrive in the classroom to work with their individual students. Some classrooms may have a class pet like a fish or a hamster. Though research suggests that classroom pets like insects, reptiles, fish, and small mammals such as hamsters support early childhood development and foster social interactions and social-emotional development (Meadan and Jegatheesan, 2010), many districts have outright banned the usage of pets in the classroom. This is not to be confused with the use of service animals used by students with disabilities, which is protected under the Individuals with Disabilities Education Act, or the use of animal interventions. Class pets have their own advantages, including engaging students in an in-person viewing of how animals behave and react compared to reading about them in a book or watching a video (Herbert and Lynch, 2017). Animals in the classroom not only provide additional instructional opportunities, but the American Educational Research Association Open Journal published a study in which animals help reduce stress, improve social skills, and increase motivation for learning in schools (García-Bullé, 2019). Other studies have shown that elementary students with pets in their classrooms have increased empathy (Daly and Suggs, 2010). These continuous links between humans and animals reveal the human-animal interaction, which can then be used for human-animal interventions. These interventions assist students in motivation and self-efficacy, engagement, self-regulation and stress coping, and social interaction (Gee, Griffin, and McCardle, 2017). These combined skills result in social emotional development and learning in the classroom (Gee, Griffin, and McCardle, 2017). This literature review will investigate the human-animal intervention (HAI) in the classroom setting, the benefits of having animals in the classroom, and animals' effects on children in early childhood, primary, and secondary education.

Research Questions

How are Service Animals, Classroom Pets, and Animal Interventions different?

What is the Human-Animal Interaction (HAI)?

What is an overview of K-12 student mental health, and how is this impacting their education?

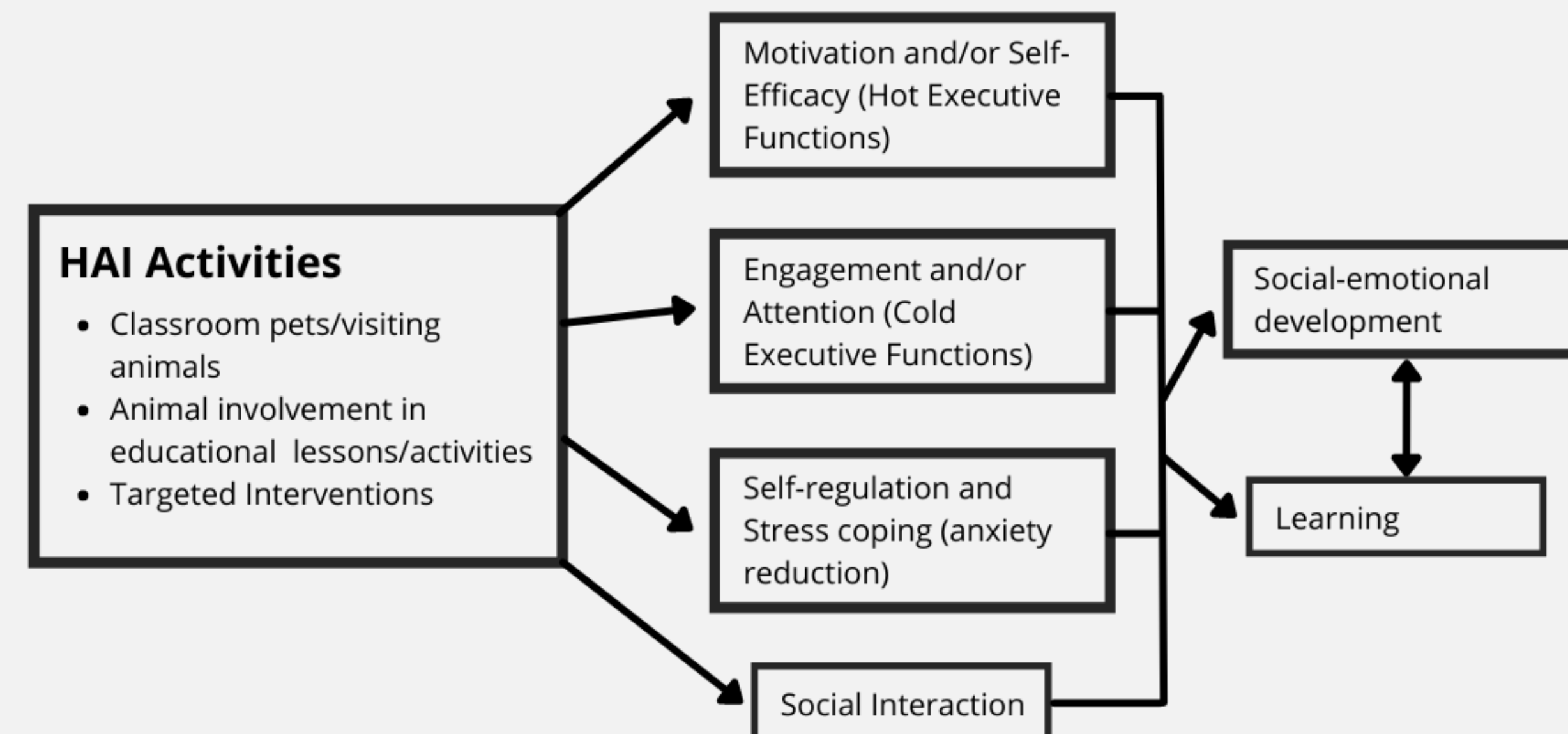
How can the Human-Animal Interaction be utilized in different educational settings (early childhood, primary school, and secondary school)?

What future research can be done using the Human-Animal Interaction?

Method

Many of the studies examined in this research included the use of animals in classrooms (Hummel and Randler, 2012; Pinto and Foulkes, 2015; Gee, Griffin, and McCardle, 2017; Pendry and Vandagriff, 2019), therapy (Brelsford et. al., 2017), and tutoring (Mills and Hall, 2014; Hall, Gee, and Mills, 2016) situations.

The participants of the studies examined were children in early childhood settings, primary school settings, and secondary school settings.



Gee, Griffin, and McCardle, 2017: Theoretical Framework which expresses the effects of HAI activities.

Findings

Early Childhood Settings

Animals in early childhood environments serve to motivate students (Mills and Hall, 2014), engage in conversations and feel connections to animals (Born, 2018), understand feelings and understand concepts like friendship, sharing, and respect based on animals portrayed in different medias like television (Meadan and Jegatheesan, 2010), empathy development (Herbert and Lynch, 2017; Daly and Suggs, 2010), and skills like compassion and responsibility (Meadan and Jegatheesan, 2010).

Primary School Settings

Animals can be used for interventions, for example, in dog-assisted reading programs which result in reduced anxiety and a positive attitude towards school and reading (Mills and Hall, 2014; Linder et al., 2018). Just having an animal in the classroom can result in student interest in lessons, higher competence, greater achievement, lower pressure (Hummel and Randler, 2012), reading gains, positive classroom behaviors (Pinto and Foulkes, 2015), increased motivation, engagement, self-regulations, social interactions, and academic learning (Gee, Griffin, and McCardle, 2017).

Secondary School Settings

College students can have Emotional Support Animals with them in their dorms and assist students with their mental health conditions as well as help in their college careers (Phillips, 2016). Students can also participate in an Animal Visitation Program (AVP) in which students can interact with animals, which has resulted in lower cortisol levels compared to students that did not interact with animals (Pendry and Vandagriff, 2019). This animal interaction can be utilized during test-taking to reduce stress levels (Pinto and Foulkes, 2015).

Critique and Implications for Future Research

Though one study mentioned that their results cannot necessarily be attributed to the animals in the interventions (Connel et al., 2019), a majority of the studies found that animals used in interventions had positive effects for the students involved, whether it be mental health related or academics. Multiple studies and journals (Gee et al., 2017; Born, 2018; Brelsford et al., 2017; Gee et al., 2015; Daly, 2010) stated additional research is needed as the topic of human-animal interactions is not often studied. Additional research is also needed to verify the correlation between the use of animals and reading achievement.

Some studies did not seem confident in the results obtained, and many studies were short term. Most studies lasted for a few weeks or a few months. Additional research is needed to report long-term results on the use of animals with interventions and students, both academically and regarding mental health.

Most studies used dogs as their animals for interventions. A few studies mentioned the use of cats in the form of pictures, but no studies used cats in their interventions. There is a gap in the literature for the use of cats in interventions. This could be due to allergies, as many dog breeds can be hypoallergenic. Implications for future research include studying the relation between mental health (stress, anxiety, etc.) and cats used in interventions. Future research is also needed to determine the relation between academics and cats used in interventions.

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