



## Cinotherapy as a health intervention for adult and aged persons: Brazilian trends

### *Cinoterapia como intervenção à saúde de pessoas adultas e idosas: tendências brasileiras*

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#### ABSTRACT

**Objective:** to analyze Brazilian trends in cinotherapy as a therapeutic intervention for the health of adult and aged people.

**Method:** A narrative review study was carried out on the theses and dissertations portal of the Coordination for the Improvement of Higher Education Personnel and the Brazilian Digital Library of Theses and Dissertations. Narrative and descriptive data analysis was used. **Results:** dissertations with a qualitative approach in speech therapy and psychology dominated. There was no homogeneity in the aspects of cinotherapy (breed of dog and number, duration, and interval of sessions). The dog acts as a facilitator of interactions and the establishment of emotional bonds. Cinotherapy can provide relief from stress, tension, and depressive symptoms. **Conclusion:** national trends in cinotherapy were identified as a therapeutic intervention for promoting and recovering the health of adult and aged persons. This practice is on the rise in the health sector.

**Keywords:** Adult. Aged. Mental health. Animal Assisted therapy.

#### RESUMO

**Objetivo:** analisar as tendências brasileiras acerca da cinoterapia como intervenção terapêutica à saúde de pessoas adultas e idosas. **Método:** estudo de revisão narrativa, realizado no portal de teses e dissertações da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior e na Biblioteca Digital Brasileira de Teses e Dissertações. Procedeu-se com análise de dados narrativa e descritiva. **Resultados:** houve predomínio de dissertações, com abordagem qualitativa, produzidas pelas áreas da fonoaudiologia e psicologia. Não se identificou homogeneidade dos aspectos que envolvem a cinoterapia (raça do cão e número, tempo de duração e intervalos das sessões). O cão atua como facilitador de interações e de estabelecimento de vínculos afetivos. A cinoterapia pode proporcionar alívio de estresse, tensões e sintomas depressivos. **Conclusão:** identificaram-se as tendências nacionais da cinoterapia como intervenção terapêutica para promoção e recuperação da saúde de pessoas adultas e idosas. Trata-se de uma prática em ascensão na área da saúde.

**Palavras-chave:** Adulto. Idoso. Saúde mental. Terapia assistida por animais.

## INTRODUCTION

Animal-assisted intervention (AAI) consists of using animals as a therapeutic strategy for conditions that affect people's health, regardless of age. This intervention has many biopsychosocial benefits, such as reducing stress and anxiety, improving cognition and behavior, and promoting socialization and bonding.<sup>1</sup>

Whether at a personal, family, and/or professional level, the bond with animals is increasingly present in people's daily lives.<sup>2</sup> Some animals have a strong therapeutic potential and support people's lives, particularly when they experience limitations, health problems, or special needs, as well as strengthening care environments such as hospitals, mental health institutions, geriatric or palliative care.<sup>2-3</sup>

In this sense, AAIs are considered powerful tools for humanizing and assisting hospitalized or institutionalized patients, as they are an innovative and holistic approach to human care. However, it is known that this type of intervention requires specific care to facilitate the development of the practice and those involved in it.<sup>3</sup>

When dogs are incorporated into these interventions, the technique is referred to as dog therapy, which is widely used within the AAIs, given that the dog is an amiable animal and its relationship with man is common and ancient.<sup>1-2</sup> In addition to these aspects, this species is easily adaptable to different environments and situations, factors that facilitate therapy.<sup>4</sup>

In addition to this, dogs have played a fundamental role in the health of vulnerable people, whether in physical, psychological, and/or social aspects, as they are facilitating agents for therapeutic issues since they establish an interface between treatment and patient<sup>5</sup>. The canine figure stimulates symbolic behaviors in the person concerning their creativity, thus favoring positive aspects mobilized through the connection between conscious and unconscious contents.<sup>1,6-7</sup>

From this perspective, a study in France found a slight improvement in the well-being of people with Alzheimer's when they received dog therapy for four weeks.<sup>8</sup> Another study carried out in China, involving adults and aged persons with schizophrenia, showed an increase in the strength

of the lower limbs and an improvement in the participants' social skills after 12 weeks of interventions with dogs.<sup>9</sup>

To this end, although dog therapy is an intervention that can be used in different healthcare environments and contexts, it is still a practice that has yet to be developed and studied. It is assumed that the need for more adherence to the practice in environments is due to limited information and beliefs that dogs are related to transmitting infections and diseases. However, it is known that dog therapy brings with it an essential aspect of humanization in care and can subvert the tense characterization of the environments in question, as well as provide improvements in interpersonal relationships and communication, favoring the recovery of the health of the people who receive it.<sup>1-2,7</sup>

Given the above, it is essential to develop studies to analyze the panorama of dog therapy, as it is a theme that meets the assumptions that involve health promotion and the prevention of diseases and injuries to people. As academic researchers, postgraduate students, and professionals in the field of health and therapy, your role in this research is crucial. This study aims to analyze Brazilian trends in dog therapy as a therapeutic intervention for the health of adults and aged people, and your contributions will be integral to its success.

## METHODS

This is a literature review study of the narrative type based on Brazilian trends in dissertations and theses on dog therapy. This design works on themes in their broadest sense, discussing concepts and descriptions, with the researcher being able to present critical and personal analyses, as well as comparing the data with existing literature. As a rule, it also uses a qualitative approach.<sup>10</sup> It is worth mentioning that, in addition to answering the objective and the proposed review question, the narrative review was chosen because it is a design that allows the state of the art of a particular topic to be explored and because it provides a theoretical and scientific contribution in the short term.

To obtain the publications, a search was carried out in the Brazilian Digital Library of

Theses and Dissertations (BDTD, in Portuguese) and the Catalog of Theses and Dissertations of the Coordination for the Improvement of Higher Education Personnel (CAPES), in June 2023. The following keywords were used as a search strategy for the sources of information: "Dog therapy," "Dog therapy," "Dog-assisted therapy," and "Animal-assisted therapy," combined with the Boolean operator "OR." No time frame or area of knowledge was defined.

Our inclusion criteria were meticulously chosen to ensure the quality and relevance of the selected studies. We focused on Brazilian theses and dissertations that specifically addressed the theme of cinotherapy as a therapeutic intervention for aged persons. To avoid redundancy, duplicate studies were only considered once. Investigations with unavailable or incomplete abstracts were excluded after exhausting all possible avenues for access, including contacting the author and accessing the library where the production was linked.

The productions were managed by a single reviewer, the main author of this production, who knows the subject. First, the titles of all the productions were read. The abstracts were then read, and the full text was accessed.

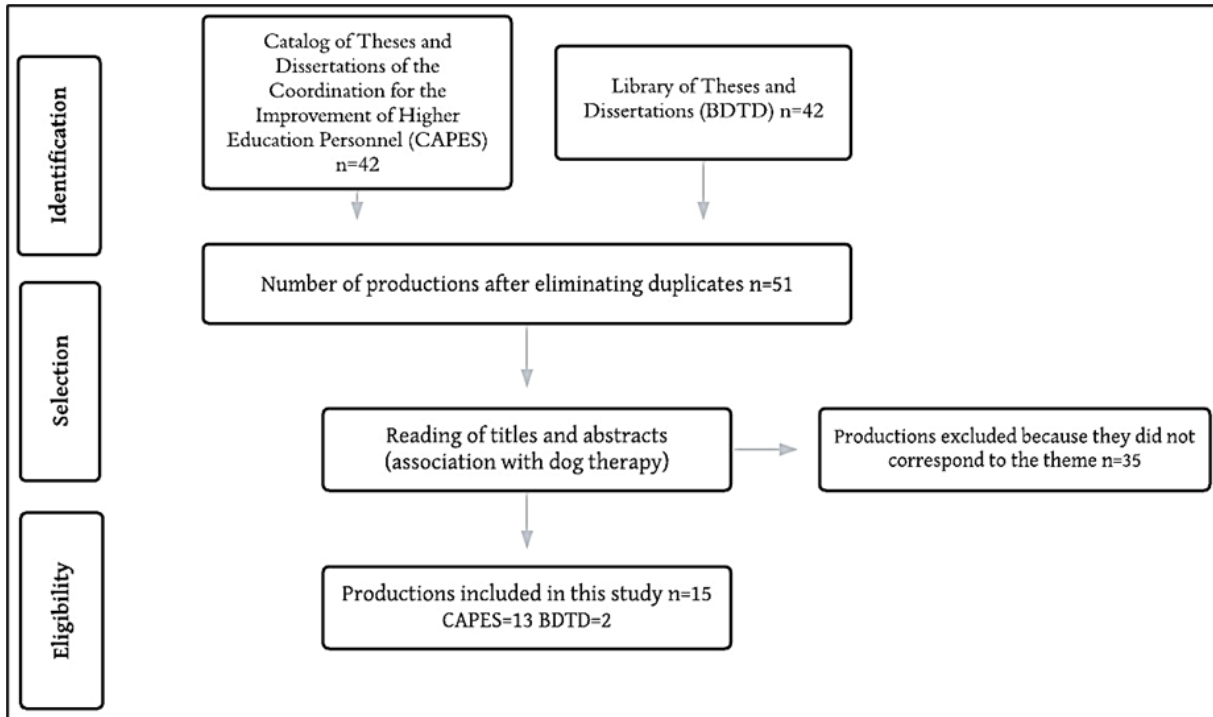
To organize the data, a table was drawn up in Word software to extract the information. The following information was listed: author, year, area of knowledge, author's training

(extracted via the Lattes curriculum), educational institution, postgraduate program, geographical region, methodological design, population and sample, intervention characteristics and outcomes, and main results and conclusions.

As for data processing, descriptive and narrative analysis was carried out, as well as analysis by similarity of information and content. The data was organized and presented using absolute (n) and relative (%) frequencies, figures, and tables. The productions in the corpus of this review were coded by the letter "E", referring to the study, followed by arabic numerals (E1=Oliveira, GR; E2=Perico, BC; E3=Pallota, ML; E4=Ichitani, T.); E5=Souza, LRC; E6=Franceschini, BT; E7=Uliana, RS; E8=Lacerda, AL; E9=Rocha, RC; E10=Queiroz, RCFB; E11=Dalcin, LM; E12=Almeida, EA; E13=Silva, CN; E14=Schutz, KL; E15=Reinert, APRP).

## RESULTS

Using the search strategies in both libraries, 42 results were obtained, totaling 84 productions. Of these, 33 were duplicates, 35 did not meet the selection criteria and one document had an unavailable abstract. Therefore, the corpus of this review consisted of 15 productions. The following flowchart (Figure 1) shows the path taken to select the studies.



**Figure 1.** Flowchart of the stages in selecting the productions for this review  
Source: Elaborated by the authors

Of the 15 studies selected, the largest proportion ( $n=4$ ; 26.6%) was published in 2020, followed by 2021 ( $n=3$ ; 20%), with an average of 1.66 studies per year between 2011 and 2021. Of these, 13 (86.7%) were dissertations (12 academic master's degrees and one professional master's degree) and two (13.3%) theses. As for the area of knowledge, five (33.3%) were from speech therapy<sup>(E1, E3, E4, E7, E11)</sup>; three (20%) corresponded to psychology<sup>(E9, E12, E15)</sup>; two (13.3%) to biomedical gerontology<sup>(E10, E14)</sup>; one (6.7%) to nursing<sup>(E5)</sup>; one (6.7%) on the biodynamics of human motricity<sup>(E2)</sup>; one (6.7%) on special education<sup>(E6)</sup>; one (6.7%) on health, technology and animal production<sup>(E8)</sup> and one (6.7%) on the area of socio-cultural practices and social development<sup>(E13)</sup>.

Concerning the geographical region of the selected productions, the Southeast was the

predominant region ( $n=8$ ; 53.3%), six of which were developed by Postgraduate Programs at the Pontifical Catholic University of São Paulo (PUC-SP). Next came the South, with 6 (40%) studies: two from the Pontifical Catholic University of Rio Grande do Sul (PUC-RS); one from the University of Cruz Alta (UNICRUZ); one from the Federal University of Santa Maria (UFSM); one from the Federal University of Health Sciences of Porto Alegre (UFCSA) and one from the Pontifical Catholic University of Paraná (PUC-PR). Next came the Northeast, with one (6.7%) production from the Federal University of Maranhão (UFMA).

Further information on the productions selected for this narrative is shown in Chart 1.

**Chart 1.** Summary table of the characteristics of studies on cinotherapy as an intervention for adult and aged people.

Code, author, and year	Methodological approach - Design - Population and sample	Characteristics of the studies and/or cinotherapy	Main results or conclusions
E1 Oliveira, GR (2011) <sup>11</sup>	- Qualitative - Case study - 10 aged persons living in a Long-Stay Institution for the Aged (ILPI)	Cinotherapy was carried out with a white poodle dog called Nara. She was present at the monthly speech therapy appointments, which lasted 45 minutes.	The dog was a facilitator of interactions and promoted the establishment of bonds. Patients improved in the expansion of conversational turns in the presence of the therapy dog.
E2 Perico, BC (2013) <sup>12</sup>	- Quantitative - Quasi-experimental - 14 adult volunteers	- Quantitative - Exploratory-descriptive, cross-sectional - Posts made on Instagram were collected and searched using the hashtags: #terapiaassistidaporanimais and #animalassistedtherapy	The results confirm that, when walking blindfolded while leading the dog, the participants performed the task more quickly and effectively, as well as showing better postural stability. Participants were able to detect the haptic properties of a dog's movement with its lead.
E3 Pallota, ML (2020) <sup>5</sup>	- Quantitative - Exploratory-descriptive, cross-sectional - Posts made on Instagram were collected and searched using the hashtags: #terapiaassistidaporanimais and #animalassistedtherapy	Content linked to Instagram was collected, such as photos and videos demonstrating the interaction between humans and dogs in the context of health.	The USA posts the most. Hospitals and support institutions for people with special needs are the places that use dog therapy the most. The most common activities are playing, reading and brushing the dog. The most relevant areas are psychology and physiotherapy.
E4 Ichitani, T (2020) <sup>13</sup>	- Qualitative - Intervention - Eight people diagnosed with stuttering were divided into two groups	In the Control Group (CG), the subjects underwent speech therapy without a dog; in the Research Group (RG), the participants received cinotherapy. Two dogs took part, Apollo: 6 years old; and Amin: 7 years old, both Golden Retriever breeds. The intervention was weekly, lasting forty minutes each session.	There was no significant difference between the groups. The data indicates greater motivation and commitment in the RG. The dogs made physical contact, provided support, and welcomed the participants in situations of psychological conflict. The presence and interaction of the dog favored the reduction of stuttering symptoms and promoted a welcoming and integrative environment.
E5 Souza, LRC (2021) <sup>3</sup>	- Qualitative - Systematic review to identify the best available evidence on the subject. - Patients in palliative care in a hospital environment were considered as the population. The sample consisted of 24 studies.	The databases used were LILACS, MEDLINE, SCOPUS, SocINDEX, WILEY, Biblioteca Online, and Web of Science.	The results point to Animal Assisted Activities for different biopsychosocial aspects of the adult, aged, and pediatric population, in the areas of mental health, oncology, palliative care, surgery, and human health that impact the quality of life and the need for hospitalization.
E6 Franceschini, BT (2017) <sup>4</sup>	- Quanti-qualitative - Quasi-experimental, before and after study - 12 aged people institutionalized in an ILPI, divided into an Experimental Group (submitted to dog therapy) and a Control Group (not submitted to the intervention).	Intervention with a small dog (no defined breed), for ten weeks, two weekly sessions of one hour and 30 minutes, with a walk along a fixed route; putting the collar on the dog; starting the walk with the lead in the right hand and then switching to the left; giving food; filling the water bowl and combing the dog.	It can be concluded that dog therapy was beneficial since it didn't show any negative results with the participants, or as reported by the local staff. The fact that the physical, emotional, and social domains were interconnected contributed to the participants' cognitive improvement.

Code, author, and year	Methodological approach - Design - Population and sample	Characteristics of the studies and/or cinotherapy	Main results or conclusions
E7 Uliana, RS (2018) <sup>6</sup>	<ul style="list-style-type: none"> <li>- Qualitative</li> <li>- Case study</li> <li>- Four females with intellectual disabilities</li> </ul>	<p>Amin, a 6-year-old Golden Retriever, was introduced into the environment for the interventions. There were seven previously scheduled sessions, each lasting 40 minutes, every week for three months. Each session had an established theme. Session 1: Family; Session 2: Affective bonds; Session 3: Self-perception; Session 4: Dog bonds; Session 5: Differences; Session 6: Life stages and Session 7: Closing.</p>	<p>Individual results after dog therapy: Person I: moved from withdrawal of feelings to expressiveness and improved comprehension; Person II: showed themselves to be passive to the world in the pre-test. In the post-test, they showed internalization of content, improved self-esteem, greater body awareness, and more active behaviors; Person III had no perception of the external, which generated instability and psychic conflicts. Improved aspects of expressing content and reduced internal conflicts. Person IV: changed with a reduction in aggression, impulsiveness, and anxiety.</p>
E8 Lacerda, AL (2021) <sup>14</sup>	<ul style="list-style-type: none"> <li>- Qualitative</li> <li>- Literature review</li> <li>- Aimed to evaluate the criteria for choosing animals for Animal Assisted Activities (AAA) in a university environment. The population studied was undergraduate students.</li> </ul>	<p>The Medline and Scielo databases were accessed. Nine studies made up the corpus of the review. Eight papers presented the interaction time; four commented on the dog's well-being, four presented the need for veterinary examinations; five addressed the breeds used and three discussed the dog's behavior.</p>	<p>The criteria for choosing animals for AAA in a university environment were up-to-date veterinary examinations and neutering of the animal. Intervention dogs were the animals that appeared most in the searches, ranging in age from six months to twelve years. Dogs of the Labrador and Golden Retriever breeds were the most found, and intervention times ranged from 10 minutes to one hour and thirty minutes.</p>
E9 Rocha, RC (2015) <sup>15</sup>	<ul style="list-style-type: none"> <li>- Qualitative</li> <li>- Exploratory, descriptive</li> <li>- Three patients admitted to a cancer institute</li> </ul>	<p>The three patients had oncological diseases and were visited by their pets, the dogs: Odim: medium-sized (Without a Defined Breed); Gorgo: large, mixed with a Pitbull; and Bisquila and Lucky: small, Pinscher breed. They were healthy and vaccinated. The visits took place outside, isolated by firefighters, and lasted between twenty and ninety minutes. One hour before the visits, the stress and pain scales were applied, and again after the dogs' visit.</p>	<p>There was a reduction in tension and stress, a minimization of signs of depression and anxiety, a reduction in social isolation and loneliness, a reduction in the perception of pain, and an improvement in quality of life. Some of the positive feelings reported by the patients were: tranquility, affection, security, calm, relaxation, happiness, good humor, excitement, and interest.</p>

Code, author, and year	Methodological approach - Design - Population and sample	Characteristics of the studies and/or cinotherapy	Main results or conclusions
<p><b>E10</b> Queiroz, RCFB (2014)<sup>16</sup></p>	<p>- Quantitative - Randomized clinical trial - 42 aged people, 21 of whom took part in the Intervention Group (IG), for whom the animal activity was offered, and 21 in the Control Group (CG), for whom the institution's regular activities were maintained.</p>	<p>The study used four dogs and five cats, all of which had been certified by a veterinarian. The animals were taken to where the aged people were and stayed with them for thirty minutes. The aged could interact with the animal of their choice, stroking, talking, walking, and/or keeping it company. There were a total of 24 sessions, twice a week.</p>	<p>There was a significant improvement in self-perception after the practices in IG, while in CG there was a worsening. There was a significant reduction in the median values of the Geriatric Depression Scale for the IG. The IG showed an improvement in the quality-of-life score compared to the CG. The intervention improved self-esteem, depressive symptoms, and quality of life among the aged persons.</p>
<p><b>E11</b> Dalcin, LM (2019)<sup>17</sup></p>	<p>- Quanti-Qualitative - Prospective - Analyzed the knowledge and acceptability of users (n=74) and employees of a Teaching Hospital in the Central Region of Rio Grande do Sul (n=132) about Animal Assisted Activity mediated by dogs.</p>	<p>An average of 59.62% of users believe that interaction with the dog can provide benefits, such as reducing pain, facilitating communication, and helping physical and emotional well-being; 86% thought it was important to include this activity in the hospital; 74.05% of staff considered the interventions to be beneficial and 8.44% judged this activity to be inappropriate for hospitals.</p>	<p>The results showed that most participants have contact with pets, the most frequent being dogs. They believed that bringing an animal into the hospital environment can provide several benefits that help not only the patient's recovery but also the general condition of family members and health professionals. Some people reported fear that the dog could transmit infections to patients.</p>
<p><b>E12</b> Almeida, EA (2014)<sup>18</sup></p>	<p>- Qualitative - Integrative literature review - Aimed to identify and characterize Brazilian scientific productions on Education, Activity, and Animal-Assisted Therapy.</p>	<p>The databases used were SciELO, LILACS, BVS-Psi, PePSIC, public and private university libraries, references, national bookstores, and authors. A total of 81 publications were found, including 26 scientific articles, 10 monographs, 19 dissertations/theses, and 26 books.</p>	<p>Dogs featured in 20% of the studies on animal-assisted interventions. Psychology was the area of knowledge with the highest number of publications, with 42%, followed by physiotherapy with 22% and nursing with 9%. The types of disabilities addressed: Cerebral Palsy; Down's Syndrome, disabilities in general, visual impairment, autism, spinal cord injury, and attention deficit hyperactivity disorder (ADHD).</p>
<p><b>E13</b> Silva, CN, (2021)<sup>19</sup></p>	<p>- Mixed - Randomized clinical study - 20 institutionalized aged people were randomly divided into two groups, a control group and an experimental group. The risk of falls, activities of daily living, and geriatric depression were assessed.</p>	<p>The experimental group (EG) (10 aged people) took part in 10 sessions of dog therapy and the control group (CG) (10 aged people) took part in 10 sessions of conventional physiotherapy, assessed before and after the sessions using tests appropriate for the elderly.</p>	<p>There was no significant difference in the analysis between the CG and SG. Both groups obtained similar results in the protocols and questionnaires applied, guaranteeing an improvement in the quality of life and well-being of institutionalized aged people through physiotherapy and dog therapy.</p>

Code, author, and year	Methodological approach - Design - Population and sample	Characteristics of the studies and/or cinotherapy	Main results or conclusions
E14 Schutz, KL (2020) <sup>20</sup>	- Qualitative - Exploratory descriptive and cross-sectional descriptive - 10 aged people institutionalized in a Long-Term Institution for the Aged (LTCF).	The study took place in three LTCFs where animal-assisted activities have been practiced for more than two years and involve various animals, including a dog of no defined breed named Faith. The selected participants answered a sociodemographic questionnaire and a semi-structured interview. The practices take place in these institutions every 15 days.	Five categories were found: "affection", "memories", "importance", "preference for a particular animal" and "fear". Feelings such as love, happiness, affection, nostalgia, memories, contentment, solidarity, and attachment emerged in the speech of the aged. The preference was for dogs, with 50% of the aged considering the presence of animals to be very important in ILPIs, 40% important, and 10% not very important.
E15 Reinert, APRP (2020) <sup>7</sup>	- Qualitative -Phenomenological study based on an analysis of scientific literature. - 42 articles were analyzed, and the databases used were: Virtual Health Library (n=14); Pubmed (n=15) and Pepsic (n=6).	Categories analyzed: type of intervention, species of therapist, study subjects, design, phenomenon, and reference to animal welfare.	Dogs were the main animals used in these interventions. Some of the results obtained are: reduced anxiety and stress and serves as potential in emotional, cognitive, and social aspects. They are also used for developmental delays, cerebral palsy, and autism. Dogs are most commonly used with children and the aged.

Source: Elaborated by the authors

Concerning the methodological approach of the studies, eight (53.3%) used the qualitative approach<sup>(E1, E4, E5, E7, E8, E9, E12, E15)</sup>; three (20.0%) the quantitative-qualitative approach<sup>(E6, E11, E14)</sup>; three (20.0%) the quantitative<sup>(E2, E3, E10)</sup> and one (6.7%) the mixed approach<sup>(E11)</sup>. As for the design of the productions, the majority (n=5; 33%)<sup>(E2, E4, E6, E10, E13)</sup> correspond to experimental studies (pre- and post-test analysis and randomized clinical trials).

When checking the scenarios of the trends found, there was a predominance of research carried out in Long-Stay Institutions for the Aged (ILPI) (n=5; 33.3%)<sup>(E1, E6, E10, E13, E14)</sup>, followed by hospital environments (n=3; 20.0%)<sup>(E5, E9, E11)</sup>. Studies were also identified with adult or aged persons in palliative care<sup>(E5)</sup>; with intellectual disabilities<sup>(E7)</sup>; with oncological diseases<sup>(E9)</sup>; and, in university environments<sup>(E8, E11)</sup>.

Looking at the length of the intervention sessions, two (13.3%) carried out the practices in 90 minutes<sup>(E6, E9)</sup>; one (6.7%) in 45<sup>(E1)</sup>; one (6.7%) in 40<sup>(E4)</sup>; one (6.7%) in 35<sup>(E7)</sup> and one (6.7%) in 30 minutes<sup>(E10)</sup>. It is also important to note that nine

(60.0%) productions did not use a time parameter.

As for the characteristics of the therapist dog, the highlight was the category "no defined breed", representing four (26.6%) productions<sup>(E6, E9, E10, E14)</sup>. Another two (13.3%) studies used dogs of the Golden Retriever breed<sup>(E4, E7)</sup>, one (6.7%) of the Akita breed<sup>(E2)</sup>, and one (6.7%) of the Poodle breed<sup>(E1)</sup>. Seven other studies (46.6%) did not include this information.

## DISCUSSION

Based on the overview of Brazilian trends on cinotherapy as a therapeutic intervention, it was noted that, in terms of the areas of practice in which the studies took place, the predominance was speech therapy, followed by psychology. This reveals a gap, given that other areas of health that provide care for adults and aged people, such as nursing, physiotherapy, and medicine, do little or no research on the subject.

The above scenario may be related to the limited resources and original studies produced



in Brazil on AAT, particularly cinotherapy. Furthermore, it is understood that there are important challenges to be faced in the process of humanizing health care, both in hospitals and in mental health and geriatric care institutions.<sup>21</sup> This challenge is because care in these institutions is still predominantly biomedical, a model characterized by individualism, curative, a hospital-centric culture, and centered on the figure of the doctor.<sup>22</sup>

As a result, it was possible to see that the first publication on the subject in this review was published in 2011, which may raise concerns about the delay in starting research into AAI. In this sense, it should be noted that they have been used since the 19th century, pioneered by William Tuke, an English philanthropist who used the technique associated with the treatment of mental illnesses, to promote physical, social, and emotional health and awaken individual cognitive functions.<sup>23</sup>

In addition, it was found that most of the productions were developed in the Southeast and South. Also noteworthy is the fact that no productions were found from the north of the country. This data is directly related to the statistics from the Directory of Research Groups in Brazil, available on the Lattes Platform - CNPq, which describe the predominance of research groups (RG) in the South and Southeast regions and the humanities and health areas.<sup>24</sup>

It was noticed that the qualitative approach stood out from the others in the development of the research. This can be explained by the fact that it is possible to work towards understanding phenomena in terms of the meanings that people attribute to them, and the data collected is predominantly descriptive.<sup>25</sup> On the other hand, it was found that experimental designs were the most commonly used in the area of cinotherapy, a fact that is justified as it is the main design when the aim is to identify the benefits of a particular intervention.<sup>26</sup>

In this sense, for example, it is known that Randomized Clinical Trials (RCTs), when properly conducted, are the gold standard among research studies, as they make it possible to evaluate and demonstrate cause and effect between a set of independent and dependent variables. RCTs have an advantage over other models due to the presence of a control group,

increasing the credibility and reliability of the study.<sup>25</sup>

As far as cinotherapy itself is concerned, a plurality in its implementation was uncovered, as Brazilian trends revealed that it was used with different patients and healthcare environments. This panorama supports the practice being incorporated as a therapeutic possibility in care institutions, safeguarding the singularities of each clinical and care context.

Similarly, while there has been no consensus on the length of sessions with a therapy dog, it has been found that they take an average of 48 minutes, with some studies revealing benefits from sessions of between 30 and 90 minutes.<sup>4,15-16</sup> A variety of dog breeds has also been identified. However, all dogs must have regular veterinary appointments be vaccinated, healthy, and trained, as well as be led by properly trained owners.<sup>1</sup>

A study analyzed the effectiveness of animal-assisted intervention on the self-perception of health, self-esteem, depressive symptoms, and quality of life of 42 aged people, divided into a control group (CG) and an intervention group (IG). After the intervention with the dogs, there was a significant improvement in self-perception and geriatric depression scores in the IG.<sup>16</sup> Another study revealed a reduction in anxiety and an improvement in mood in university students when they interacted with dogs.<sup>27</sup>

Therefore, based on the data in this narrative, the main benefits of cinotherapy were observed, as the figure of the dog proved to be a facilitator of interactions and the establishment of emotional bonds.<sup>4,11,13</sup> The results point to cinotherapy as a tool for reducing stress, tension, and depressive symptoms, favoring the quality of life of the people who receive the therapy. Feelings of tranquility, affection, hope, happiness, relaxation, good humor, cheerfulness, satisfaction, and interest were expressed by people undergoing dog therapy.<sup>6,13,15,20</sup> It is worth mentioning that the effectiveness of cinotherapy for the above outcomes needs to be tested; therefore, the data from this review needs to be interpreted carefully and, above all, considered as an incentive for future research.

It is pertinent to reflect on the care needed with the therapy dog during the

interventions. In this sense, the animal's temperament should be checked to prevent it from becoming stressed or exhausted. In addition, it is necessary to consider its hydration, nutrition, and evacuation needs and provide an adequate rest interval between cinotherapy sessions.<sup>28</sup>

Given the above, it is worth reflecting on the practical implications of using cinotherapy in research and as a therapeutic intervention for adult and aged persons. Although the subject is on the rise, further research is needed, especially in the field of nursing, the main category involved in health care. In addition, mixed-method research and new experimental studies, conducted by methodological guidelines, are needed.

It is also worth mentioning that, although narrative reviews are flexible in their methodological aspects, not considering studies with children or adolescents may have limited the analysis of Brazilian trends, as well as not screening and selecting studies in a double-independent manner. To this end, we suggest that the panorama of this review be consumed with caution and that researchers be encouraged to conduct further research into the subject.

## CONCLUSION

Through this narrative, it was possible to identify trends in Brazilian theses and dissertations on cinotherapy as a therapeutic intervention for promoting and recovering the health of adult and aged people. The studies revealed that the practice can be considered a potential interventional strategy for coping with and alleviating people's health problems; with this, it favors the quality of life of those who receive the intervention. Furthermore, the dog acts mainly as a facilitator of interactions and the establishment of emotional bonds.

In summary, most of the studies were defended in this decade, with institutional prevalence at the Pontifical Catholic University of São Paulo and in the southeast region. In terms of areas of knowledge, speech therapy, and psychology stood out, with qualitative methodological approaches and experimental designs being the most prevalent. There was a

dominance of studies carried out in Long Stay Institutions for the Elderly and in hospitals, mainly with aged people. There was also no homogeneity in the aspects involving cinotherapy as a therapeutic intervention (breed of dog and number, duration, and intervals of sessions).

## REFERENCES

1. McDowall S, Hazel SJ, Cobb M, Hamilton-Bruce A. Understanding the Role of Therapy Dogs in Human Health Promotion. *Int J Environ Res Public Health*. 2023;20(10):5801. <https://doi.org/10.3390/ijerph20105801>
2. Gee NR, Rodriguez KE, Fine AH, Trammell JP. Dogs Supporting Human Health and Well-Being: A Biopsychosocial Approach. *Front Vet Sci*. 2021;30(8):630465. <https://doi.org/10.3389/fvets.2021.630465>
3. Souza LRC. Guia de boas práticas em enfermagem com ênfase nas atividades e terapias assistidas por animais no contexto dos cuidados paliativos. [Dissertação de Mestrado Profissional em Enfermagem]. Universidade Federal de Ciências da Saúde de Porto Alegre; 2021.
4. Franceschini BT. Terapia assistida por animais: sua eficácia no desempenho cognitivo de idosos institucionalizados. [Dissertação de Mestrado em Educação Especial]. Universidade Federal De São Carlos, 2017.
5. Pallotta ML. A relação humano-cão no contexto da saúde humana: considerações sobre conteúdos veiculados no Instagram. [Dissertação de Mestrado em Comunicação Humana e Saúde]. Pontifícia Universidade Católica De São Paulo, 2020.
6. Uliana RS. Efeitos das intervenções assistidas por animais na expressão verbal e não verbal de conteúdos psíquicos em sujeitos adultos com deficiência intelectual. [Dissertação de Mestrado em Comunicação

- Humana e Saúde]. Pontifícia Universidade Católica de São Paulo, 2018.
7. Reinert APRP. Intervenções assistidas por animais: diálogos sobre animais coterapeutas, bem-estar animal e clínica de orientação fenomenológica. [Dissertação de Mestrado em Psicologia]. Universidade Federal do Maranhão, 2020.
  8. Thirion E, Rouissi S, Dauphinot V, Garnier-Crussard A, Coste M-H, Krolak-Salmon P. Impact de la thérapie assistée par l'animal sur le bien être chez des patients présentant une maladie d'Alzheimer (étude ELIAUT). *Geriatr Psychol Neuropsychiatr Vieil*. 2023;21(4):506-516. <https://doi.org/10.1684/pnv.2023.1134>
  9. Chen CR, Hung CF, Lee YW, Tseng WT, Chen ML, Chen TT. Functional Outcomes in a Randomized Controlled Trial of Animal-Assisted Therapy on Middle-Aged and Older Adults with Schizophrenia. *Int. J. Environ. Res. Public Health*. 2022;19(6270):1-9. <https://doi.org/10.3390/ijerph19106270>
  10. Rother ET. Revisão sistemática x revisão narrativa. *Acta Paul. Enferm*. 2007;20(2):v-vi. <http://dx.doi.org/10.1590/S0103-21002007000200001>
  11. Oliveira GR. A interação fonoaudiólogo-paciente-cão: efeitos na comunicação de pacientes idosos. [Dissertação de Mestrado em Fonoaudiologia]. Pontifícia Universidade Católica De São Paulo, 2011.
  12. Perico BC. Efeito da percepção háptica obtida por meio da condução de um cão na estabilidade locomotora do ser humano. [Dissertação de Mestrado em Ciências do Movimento]. Universidade Estadual Paulista Júlio De Mesquita Filho, 2013.
  13. Ichitani T. Terapia fonoaudiológica assistida por animais: proposta de tratamento para sujeitos que gaguejam. [Tese de Doutorado em Comunicação Humana e Saúde]. Universidade Católica de São Paulo, 2020.
  14. Lacerda AL. Atividades assistidas por animais em ambiente universitário. [Tese de Doutorado em Ciência Animal]. Pontifícia Universidade Católica Do Paraná, 2021.
  15. Rocha RC. Visita de animal de estimação: proposta de atividade terapêutica assistida por animais a pacientes internados em hospital oncológico. [Dissertação de Mestrado em Psicologia]. Pontifícia Universidade Católica de São Paulo, 2015.
  16. Queiroz RCFB. Eficácia da intervenção assistida por animais na autopercepção de saúde, autoestima, sintomas depressivos e qualidade de vida relacionada à saúde em idosos residentes em instituição de longa permanência. [Tese de Doutorado em Gerontologia Biomédica]. Pontifícia Universidade Católica Do Rio Grande Do Sul, 2014.
  17. Dalcin LM. O conhecimento e a aceitabilidade de usuários e servidores do hospital universitário de santa maria em relação à inserção da atividade assistida por animais mediada por cães. [Dissertação de Mestrado em Distúrbios Da Comunicação Humana]. Universidade Federal De Santa Maria, 2019.
  18. Almeida EA. Educação, atividade e terapia assistida por animais: revisão integrativa de produções científicas brasileiras. [Dissertação de Mestrado em Psicologia Da Educação]. Pontifícia Universidade Católica De São Paulo, 2014.
  19. Silva CN. A cinoterapia como recurso fisioterapêutico na evolução biopsicossocial de idosos institucionalizados de uma cidade do sul do brasil. [Dissertação de Mestrado em Práticas Socioculturais e Desenvolvimento Social]. Universidade de Cruz Alta – UNICRUZ, 2021.
  20. Schutz KL. Quem veio hoje? percepção de idosos residentes de instituições de longa permanência sobre as atividades assistidas com animais. [Dissertação de Mestrado em Gerontologia Biomédica]. Pontifícia

Universidade Católica do Rio Grande do Sul, 2020.

<https://doi.org/10.1590/2526-8910.ctoAR2087>

21. Siqueira DF, Marques SS, Brum AST, Flores AND, Ruppelt BC, Souto VT, et al. Prática de cinoterapia com pessoas internadas em unidade de atenção psicossocial: relato de experiência. *Research, Society and Development*. 2020;9(9)1-10. <https://doi.org/10.33448/rsd-v9i9.7559>

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22. Koifman L. O modelo biomédico e a reformulação do currículo médico da Universidade Federal Fluminense. *Hist. cienc. saude-Manguinhos*. 2001;8(1):48-70. <https://doi.org/10.1590/S0104-59702001000200003>
23. Dotti J. *Terapia & animais*. São Paulo: PC Editorial, 294 p., 2005.
24. Diretório dos Grupos de Pesquisa no Brasil. Plataforma Lattes, Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq). Disponível em: <http://lattes.cnpq.br/web/dgp>
25. Augusto CA, Souza JP, Dellagnelo EHL, Cario SAF. Pesquisa Qualitativa: rigor metodológico no tratamento da teoria dos custos de transação em artigos apresentados nos congressos da Sober (2007-2011). *Revista de economia e sociologia rural*. 2013;51(4)745-764. <https://doi.org/10.1590/S0103-20032013000400007>
26. Gil AC. *Como elaborar projetos de pesquisa*. 4. ed. São Paulo: Atlas, 2008.
27. Thelwell ELR. Paws for Thought: A Controlled Study Investigating the Benefits of Interacting with a House-Trained Dog on University Students Mood and Anxiety. *Animals (Basel)*. 2019;9(10):846. <https://doi.org/10.3390/ani9100846>
28. Figueiredo MO, Alegretti AL, Magalhães L. Canine-assisted Occupational Therapy: a scoping review of the Brazilian literature. *Cadernos Brasileiros de Terapia Ocupacional*. 2021;29:e2087.