



Effects of Animal Assisted Activity in elderly's communication conducts: speech therapy approach

Efeitos da Atividade Assistida por Animais nas condutas comunicativas de idosos: abordagem fonoaudiológica

Efectos de la Actividad Asistida por Animales en las conductas comunicativas de ancianos: enfoque de la terapia del habla

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Abstract

Introduction: Studies on the use of animals in the treatment of people emphasize the promotion or improvement of health related to the beneficial effects of the so-called Animal-Assisted Interventions, the IAAs. **Objective:** To describe the effects of Animal Assisted Activity (AAA) in elderly communication. **Method:** Research of clinical-qualitative nature, developed in a geriatric clinic, obeying the ethical criteria for conducting research with human beings. **Casistry:** 09 elderly, of both genders, in the age group between 61 and 92 years who demonstrated disposition / motivation through contact with the dog participating in the study. **Dog selection** followed criteria relating to health assessment, temperament and socialization. **Procedure:** Six group visits, monthly, lasting 45 minutes, videotaped. The material was transcribed for the most significant verbal and non-verbal elements of the speech-hearing-elderly-dog interaction, favoring communicative behaviors. Three visits of the researcher were registered without the presence of the dog, for comparative effect. **Results:** The presence of the dog was a facilitator of the interactions and promoted the establishment / strengthening of the interpersonal ties regarding the occurrence and characterization of the dialogical activity, occurrence and characterization of nonverbal behaviors and psychosocial behaviors of the elderly. **Conclusion:** The presence of the dog was configured

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GRO: study conception and design, worked in the research, methodology, data analysis and interpretation, drafting, revision and final approval of the version to be published.

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as a potent resource, whose effectiveness was revealed by the significant evolution of the communicative performance of the studied subjects. This research intends to contribute with the search of scientific evidences on the subject, specifically in Speech, Language and Hearing Sciences.

Keywords: Speech, Language and Hearing Sciences; Animal Assisted Therapy; Dogs; Elderly; Communication

Resumo

Introdução: Nos dias atuais, estudos sobre o uso dos animais no tratamento com pessoas (Intervenções Assistidas por Animais, as IAAs) ressaltam efeitos benéficos, melhoria na promoção ou melhoria da saúde. **Objetivo:** Descrever os efeitos da Atividade Assistida por Animais (AAA) nas condutas comunicativas de idosos. **Método:** Pesquisa de natureza clínico-qualitativa, desenvolvida em uma clínica geriátrica, obedecendo aos critérios éticos para a realização de pesquisas com seres humanos. Casuística: nove idosos, de ambos os sexos, na faixa etária entre 61 e 92 anos, residentes em uma clínica, que demonstraram disposição/motivação mediante contato com o cão participante do estudo. **Procedimento:** foram seis sessões em grupo, de periodicidade mensal, com duração de 45 minutos, gravados em vídeo. O material foi transcrito ortograficamente destacando-se os elementos verbais e não verbais mais significantes da interação fonoaudiólogo-idosos-cão, privilegiando-se as condutas comunicativas. Foram registradas três sessões da pesquisadora ao grupo dos nove idosos sem a presença do cão, para efeito comparativo. **Resultados:** A presença do cão foi um facilitador das interações e promoveu o estabelecimento/ fortalecimento dos vínculos interpessoais quanto à ocorrência e a caracterização da atividade dialógica, ocorrência e caracterização de condutas não verbais e das condutas psicossociais dos idosos. **Conclusão:** A presença do cão configurou-se como recurso potente, cuja efetividade foi revelada pela evolução significativa do desempenho comunicativo dos sujeitos estudados. Esta pesquisa pretendeu contribuir com a busca de evidências científicas sobre o tema, especificamente na Fonoaudiologia.

Palavras-chave: Fonoaudiologia; Terapia Assistida por Animais; Cães; Idoso; Comunicação.

Resumen

Introducción Estudios sobre el uso de animales en el tratamiento de personas muestran la promoción, el perfeccionamiento de la salud relacionada con los beneficios de las intervenciones de ayuda para los animales, el IAA. **Objetivo** Describir los efectos de la actividad asistida para Animales (AAA) en la comunicación de los ancianos. **Método** Investigación clínico-cualitativa, en una clínica geriátrica, de acuerdo con criterios éticos para la realización de investigaciones en humanos. Pacientes: 09 ancianos de los dos sexos, con edades entre 61-92 años que han demostrado su voluntad/motivación poniéndose en contacto con el estudio del perro participante. El perro siguió criterios de selección para la evaluación de la salud, el temperamento y la socialización. **Procedimiento:** seis sesiones grupales mensuales con duración de 45 minutos, grabadas en vídeo. El material fue transcrito en relación a los elementos verbales y no verbales más significativos de la interacción fonoaudiólogo-ancianos-perro, destacando los comportamientos comunicativos. Fueron registradas tres visitas del investigador sin el perro, a efectos comparativos. **Resultados** La presencia del perro fue un facilitador de las interacciones y ha promovido el establecimiento / fortalecimiento de los vínculos interpersonales como la ocurrencia y la caracterización de la actividad dialógica, ocurrencia y caracterización de comportamientos no verbales y comportamientos psicossociales de los ancianos. **Conclusión** La presencia del perro ha configurado como poderoso recurso cuya eficacia ha sido revelada por la evolución significativa de la comunicación de los sujetos estudiados. Esta investigación objetiva contribuir a la búsqueda de evidencias científicas sobre el tema, específicamente en la Fonoaudiología.

Palabras clave: Lenguaje, Lenguaje y Ciencias de la Audición; Terapia Asistida Animal; Perros; Mayor; Comunicación

Introduction

The relationship between humans and animals is historically evidenced mainly by the emotional bond¹, as it can be noted in a record of 12,000 years ago of the skeleton of a human being embraced with a puppy that was found in northern Israel. Currently, the production of studies concerning the use of animals in the treatment of people with health problems, which is called Animal-Assisted Interventions (AAIs), has been evidenced, thus emphasizing their beneficial effects in the promotion or improvement of health issues².

The International Association of Human-Animal Interaction Organizations (IAHAIO), one of the most active organizations in advancing the understanding and analysis of the human-animal interaction, defined the Animal-Assisted Intervention (AAI) as a goal-oriented intervention that intentionally incorporates or includes animals to human treatment, whether it is educational and/or health care for the purpose of therapeutic gains³. This purpose includes:

- Animal-Assisted Activity (AAA): informal interactions and/or visitations conducted for motivational, educational and recreational purposes. When conducted by (health care, education and/or related fields) professionals, the AAAs may directly address in a therapeutic process with specific targets³.
- Animal-Assisted Education (EAA) or Animal-Assisted Pedagogy: therapeutic intervention planned and directed by education professionals and professionals from related areas. The activities are focused on academic purposes, pro-social skills and cognitive functioning³.
- Animal-Assisted Therapy (AAT): therapeutic intervention planned and structured by goals, which is targeted by health care professionals, as well as education professionals and professionals from related areas³.

Different species of animals can be used for such intervention: cats, rabbits, turtles, horses, hamsters, birds, and even exotic animals, such as iguanas and escargots⁴. However, according to some experts, dogs are considered best suited due to their constant evolution in studies on behavior, in addition to well-known and controlled zoonosis, therefore, making it safer for human contact. As they are the most used animals due to their sociability, easy training and also due to the acceptance on

the most part of people^{2,5}, it should be noted that the presence of the dog encourages the development of positive feelings, affection exchange and a sense of comfort and well-being⁶.

Based on the investigation of researches with respect to AAIs, several places are adhering to this intervention, such as hospitals, nursing homes, palliative care units, mental health institutions, schools and prisons. These institutions are presenting proposals for improvements in mood, motivation, self-esteem and psychological and physical well-being of the patients involved^{2,3}. The positive effects of these approaches are expanded in the health care and education fields, such as: reduction in anxiety⁷; decrease in cortisol and adrenaline levels, as well as increased levels of oxytocin (hormones associated with stress)⁸; assistance in health care and socialization treatments⁹; improvement in coping with the disease¹⁰; increased well-being and comfort in hospitalized children¹¹; reduction/overcoming symptoms expressed in oral and/or graphic language, as well as mobilization of positive affectivity of patients¹²; intensification of the dialogic activity; gestures and affectivity of children¹³; improvement in the quality of life of patients and in the general feeling of well-being¹⁴; among others.

AAIs can be recommended for people of all ages and disorders; such as autism, dementia, chronic diseases, mental and neurological disorders as in aphasia and epilepsy, etc^{15,16}. Reports of experiences and research data in areas such as medicine, nursing, physiotherapy and psychology, confirm and extend the physical, social and psychic benefits reached by patients in such interventions¹². However, studies are still restricted regarding the specificities in the speech-language pathology field. Therefore, and in the light of the reflection on world population aging and social care policies associated to that segment, it opens the possibility of discussing the topic with institutionalized elderly.

Although it is a young country, Brazil is currently a country with an aging population, since every year 650,000 elderly are incorporated into the Brazilian population, most of them with chronic diseases and functional limitations¹⁷. Speech-language pathologists are increasingly being included in the context of the increase in the number of health care professionals specialized in the care of the elderly. A great progress that has been achieved was the opinion of the Brazilian Federal Council of Speech, Language and Hearing

Sciences (CFFa)¹⁸ that enabled the clear inclusion of speech-language care in the Primary Health Care Procedures of the Elderly by stating the potential for action of Speech-Language Therapy, as follows: different ways to mitigate the effects of hearing loss; systematization of intervention on language-related aspects; warning that aging may change oral, pharyngeal and esophageal phases of swallowing; considerations on vocal aging (presbyphonia), indicating that the elderly may show quality loss (mild instability, flicker) and/or vocal power reduction¹⁸.

Institutionalization is a condition that may contribute in reducing the quality of life of older people, and these may present changes such as social isolation, decreased motor skills and depression. Therefore, there is a growing concern to create actions in order to reduce the negative effects of institutionalization¹⁹. Several studies underline the essential role of Long-Stay Institutions (LSIs) operating as mediators and promoters of a new social network. These studies also recognize that the applicability of the health promotion concept in the field of LSIs is complex and, as so, they highlight the need for actions that include the elderly as a historical subject with their culture, dreams, feelings and questions, which imposes the search for effective strategies on the part of the professionals of the LSIs¹⁹.

The AAI is a strategy that may be understood as an alternative tool to promote the quality of life of the institutionalized elderly. According to data collected from a research, whose purpose was to analyze the effects of the AAA in the quality of life of a group of elderly, comparing them with a control group (without AAA), there was improvement in the physical, emotional and social dimensions; the social aspect (18%) recorded the greatest difference observed, followed by emotional (16%) and physical (6%) aspects²⁰. Another study also states that the AAI use allows the rehabilitation of social relationship as it improves cognition and mitigates depressive symptoms, in addition to assist in the autonomy of the person and their psychological functions²¹.

Considering the above, especially the relevance of the active participation of speech-language therapy in the production of knowledge and the search for scientific evidence with respect to the potential for changing the therapeutic environment in this health care option (AAI).

Objective

To describe the effects of Animal-Assisted Intervention (AAI) on elderly communication behaviors.

Method

This study is in compliance with the recommendations of Resolution 196/96 of the Brazilian National Council of Health, of the Ministry of Health and it is duly approved by the Ethics and Research Committee of the institution of origin (report no. 195/2009).

In order to preserve confidentiality, the names of the subjects were replaced by their initials (Ma, Ru, Zc, Sa, M, Ju, Ve, Fa, De).

1. Study of cases: Nine elderly residents at a health clinic, male and female, aged between 61 and 92 years old who demonstrated motivation/willingness to get in contact with the dog participating in the study.

- **Selection criteria:** elderly residents in the geriatric clinic where the study was conducted, who showed motivation/willingness to get in contact with the dog study participant and who also presented favorable communication conditions with the speech-language therapist/researcher.
- **Selection of the dog participant:** To ensure the safety of those involved during data collection, the choice of Nara, a white poodle, with two years and eight months of age followed the criteria regarding the temperament and socialization, as well as to the health of the animal. The evaluation of temperament and behavior of the animal consisted in checking several reactions, such as reactions with unknown people and to a loud sound and/or new stimulus; as well as their reactions to aggressive voice/threatening gestures, or to vigorous caresses and clumsy, or a hug; in addition to their reaction to other animals and their ability to obey to the researcher's instructions. As for the health of the animal, they should be vaccinated against rabies, V8 or V10, giardia, dog cough, in addition to the monitoring and evaluation of veterinarian with respect to pest control, such as fleas, ticks and parasites, through routine tests for parasites.²²

The veterinary and hygienic care follow-up (weekly bath, and grooming when necessary) were permanent. The basic instructions exercise ("sit", "lie" and "stay") and the socialization of the ani-

mal were continuous, and, although she has been approved in tests of temperament and socialization, Nara was taken to the place where the study was conducted before the AAAs to be adapted to it and to recognize the physical space.⁶ To ensure a better accommodation and welfare in the care provided to Nara, an appropriate structure was prepared in the physical space in the institution, including supplies such as water and food bowls, hygienic carpet and a bed. The Sanitary Surveillance Agency was informed about the conduct of the research, and received the documentation of the animal.

2. Procedure: Study presented and approved by the institution in which it was developed and a Free and Informed Consent Term (FICT) was signed by those responsible for the participants, since they also signed for the permanence of the elderly in the clinic.

Two previous AAAs (involving interaction, physical contact and animal feed) were conducted to assess individual motivations (in the presence and in contact with the dog) and to select participants (according to the criteria presented above).

The 45-minute sessions were held in groups, every month, for six months (from October 2009 to March 2010). The sessions were filmed in a digital video camera. These recordings were transcribed orthographically, and then used to analyze the more meaningful verbal and non-verbal elements in the interaction of the speech-language pathologists, the elderly and the dog; always prioritizing the commu-

nication behaviors of the elderly participants. Most of the activities was held in an outdoor area (in warm days) and on a TV room (in cold and/or rainy days). The activities were focused in remembering past experiences of living with animals and in the current experiences with the dog participating.

Three sessions with the speech-language therapist/researcher, but without the dog were held, intercalating with the AAAs, and also recorded in audio and video, for comparative effect, therefore, totaling nine sessions.

Results interpretation was conducted through content analysis²³, based on the studies on aging, human communication and language disorders in aging, as well as in papers on AAI in different areas of health. The effects of the interaction between the speech-language therapist, the participant and the dog were addressed in a way to set two categories: 1) occurrence and characterization of the dialogic activity; and 2) occurrence and characterization of non-verbal (gestures and body movements, eye contact) and psychosocial behaviors. Results have been analyzed comparatively, as events of the first and last interventions.

Results

The sample is presented in the chart with the name of the elderly, gender, date of birth, age, date of admission, and medical diagnosis recorded in the institution.

Chart #1. Data of elderly participants

Name	Gender	Date of birth	Age	Date of admission	Medical diagnosis
1 - Ma	Female	04/27/1949	61	11/19/2009	Seizures, depression and fibromyalgia
2 - Ru	Female	11/16/1932	78	2/9/2008	Alzheimer's Disease
3 - Ze	Male	5/24/1930	80	9/30/2009	Dementia condition
4 - Sa	Female	06/25/1929	81	11/14/2009	History of lumbar vertebral fracture
5 - M	Male	3/6/1929	81	1/22/2009	Parkinson's Disease
6 - Ju	Female	5/4/1923	87	4/10/2003	Fibromyalgia
7 - Ve	Female	6/6/1919	91	10/3/2008	Hearing Deficiency
8 - Fa	Female	5/6/1919	91	3/31/2009	Alzheimer's Disease
9 - De	Female	5/16/1918	92	10/19/2009	Progressive dementia in the last 07 years

The two categories of analysis²³, with their examples of speech of the elderly, are presented in the following.

1. Occurrence and characterization of the dialogic activity: At the beginning of the AAAs, the elderly were not interacting so much with each other. They remained quiet for most of the time. Some of them were napping in the armchairs, while others were reading books or watching TV; and they just smiled when they met Nara. In the process, they have significantly changed such behavior: the dialog was intensified to the extent that Nara began to constitute herself as a possible interlocutor.

Thus, an indirect speech was added to the verbal interaction with the speech-language therapist or between them, to the extent that they spoke to, but also as Nara. They started to tell or ask something to Nara, and then they “answered” (changing their intonation) in order to put themselves in her role. The topics in these interactions were often related to the skills, the love and the care of the dog. The following are examples that characterize relevant segments observed in this context.

Segment #1

F: Speech-Language Therapist Ma: Participant

Ma was sitting on the couch in the TV room.

Chart #2 – Segment 1

F: “Nara, say hello to Ma!”.

Ma (using intonation different from her usual voice - more acute and childish): “Hi, come here! I’m using your special color today (referring to her white clothes)

F: “I see, your clothes are really white today!”.

Ma: “Now that she took her little shower, bring her here” (placing her own hands on her lap).

The speech-language therapist put Nara in Ma’s lap, who says, again with an even sharper voice: “Oh, you’re so sweet, sit here, my little baby”. Nara tried to lick the Ma’s face, and she said: “Kiss me, that’s so good, my princess, it’s your aunt” (Nara continued licking her face, while Ze was watching and smiling).

Ma: “I’ll give you a kiss. Do you want it? I’ll do like this... (and she started to caress behind Nara’s ear). Oh, you’re so sweet! Lean against me like this, that’s right (she touched her forehead to Nara’s snout, who licked her face). You are so affectionate, aren’t you? My beloved baby!”

Segment #2

F: Speech-Language Therapist Sa and Ru: Participant

FS: Sa’s son

Ru, the speech-language therapist and Nara were visiting Sa’s bedroom, who was with her son (F).

Chart #3 – Segment 2

Sa: “Come here, Nara, come here! Nara, my baby! Oh, you’re so beautiful! Give me a kiss!”.(Nara licked her hand). “Pretty, pretty! You are so pretty! Kiss my hand!”

Then, the therapist placed Nara in the lap of Sa, who hugged her.

Sa: “Oh, you’re so cute!”

F: “Don’t you think that she looks like a cotton ball, Sa?”

Sa and FS answer at the same time: “Yes!”

Sa: “Oh, this puppy is a beautiful little thing!”

Ru: “She doesn’t want to leave”.

Sa: “Nara, is smelling everything, isn’t her?. And she is right, she should smell where she is”.

Ru asks for a Kiss (in order to proudly show that Nara obeyed to her). Nara licks **Ru**’s face and **Sa** says:

“Kisser, kisser”.

Ru: “This puppy is so cute, isn’t, Sa?”

Sa: “See you later, baby, thank you”

It should be noted that the elderly questioned the therapist in this process of humanization of Nara: "Is your daughter allowed to date, mom?", "is she a good child?", thus representing a motivation for the dialog whose content was often resumed in future interactions, generating narratives with desirable temporal references.

2. Occurrence and characterization of non-verbal (gestures and body movements, eye contact) and psychosocial behaviors: The presence of Nara often promoted non-verbal behaviors based on an expression of affection: the elderly caressed, kissed and hugged Nara and these gestures were

intensifying at each meeting. They used to smile, to her and to their colleagues, when they saw her arriving, and some even started to clap. In this context, the group interaction was significant, and gradually, the elderly started to realize the affection gesture preferred by Nara and talked about suggestions on the most effective ways to ask and to win her affection.

Segment #3

Ze and Ru: Elderly Participants

While the speech-language therapist was talking to Ma, Ru was sitting next to Ze and she was holding Nara's leash. Nara put her front legs on Ze's leg and:

Chart #4 – Segment 3

Ru: "Oh! She wants you! Come on! You can take her!" Ze put Nara in his lap and Ru laughed.
Ze: "My darling, you're a sweetheart."
Ru says to Ze: "Ask for a kiss", while showing him how to get his head closer to Nara.
Ze: "Kiss me!" (Then Nara licked his face). Ru and Ze laughed at it.
Ru says to Ze: "Isn't she beautiful?"
Ze: "That's very nice!", while hugging Nara.
Ru: "She likes people, doesn't?"
Ze(while petting Nara): "She likes to scratch her back."
Ru: "Yes, she does. You can do this (petting her) that she also likes it, gently". Nara moved while in the lap of Ze and he asked: "Do you want to go to the floor?"
Ru: "You can put her here" (pointing to her feet)
Ru helped Ze to put Nara on the floor and said: "Calm down, my baby, carefully". "Sit down" (Nara sat and Ru with a smile on her face, pleased to see Nara obeying to her instructions, said: "Good girl".
Minutes later, Nara put her front legs on the Ze's leg again and
Ru: "Hey, look! She likes you!". Ze smiled and Nara started to make movements with her front paw in his legs, as if she was asking for something. Ru and Ze were laughing.
Ru (smiling): "She wants you!".
The two of them remained for a time admiring and talking about Nara, who insisted on making the same movements in Ze's leg.
The **therapist** decided to intervene: "Do you know what she wants?" She's asking you to grab her and put her in your lap".
Ze grabbed Nara and **Ru** said: "You can kiss him! Go ahead, kiss him!"
Ze: "So, how our beloved Nara is doing? Someday, Nara will come here to the clinic and she won't leave us anymore. She will stay with us. Nara is like a queen here..."

A recurring topic in our meetings: even though the elderly were dependents in relation to their own feeding habits, they were concerned with Nara's feeding. They were interested in knowing if there was food and water available, and they often asked if they could offer their own food to her. They used to offer snacks to her when she obeyed some instruction ("sit", "lie" and "rotate"). In addition, they had fun hiding snacks in one hand, so that she could "guess" in which hand it would be.

Segment #4

Fa: Participant

Fa participated in all AAAs, but always as an observer. She used to speak in a quiet and unintelligible way. One day, the speech-language therapist and Nara were in the TV room with the elderly and, as it was really warm, they went to the outdoor area. Fa didn't want to go, but when she saw the speech-language therapist returning with Nara, she said that she heard the "food party promoted by Nara" and, as so, she had kept half of her own snack to give it to her, too. She was allowed to do so, so she cut the snack into pieces and gave it to Nara. Such conduct showed a desire of belonging to group activities, despite the ordinary restrictions.

The most significant results observed in each subject during the AAAs process.

Chart #5 – Elderly Communication Behaviors with a dog

Subject	Elderly Communication Behaviors with a dog
1 – Ma	Intensification of verbalizations and vocal intonation, especially when "talking" to Nara.
2 – Ru	She remembered and told her experiences with her own pets. She held the leash, walked with Nara, and talked to the people who met them.
3 – Ze	Intensification of verbalizations.
4 – As	Intensification of communicative behavior. She was very happy with the visits in her own bedroom and she used to say that when she received Nara, she was "receiving" health.
5 – M	Intensification of verbalizations. He recited poetry and sang to Nara. In one of meets, Nara accompanied (by howling) while he was singing. From that moment on, he began to call her as "partner".
6 – Ju	Intensification of gestural communication (she clapped her hands for attention), increased vocal intensity.
7 – Ve	While she was caressing Nara, she used to tell stories of her own life and she said that she was surprised at being able to talk about painful moments, such as her mother's death.
8 – Fa	Increased vocal intensity and was better understood, which favored the dialog.
9 – De	She used to tell stories about her own life, especially memories about her pets.

As mentioned in the Method, three sessions were held with the speech-language therapist/researcher without the dog. Check in Chart #6 the importance of the dog to some elderly.

Segment #5

F: Speech-Language Therapist Ma, Ze, Ru: Patient

The speech-language therapist came into the room and Ma made an objection soon after.

Chart #6 – Segment 5

Ma- "Oh, where is she?"
F- "Are you ok?"
Ze- "Oh..."
Ma- "Oh, where's the little girl?"
F- "So, can't I come here without her?"
Ma- "Bye, bye, bye. You may go. We do like you, but we really want Nara".
Ze- "You can turn around."
F- "Can you see, Ru? Can I come alone or only when Nara is with me?"
Ru- "You and her, together."
Ma- "I don't like it when you're alone."
Ze- "You are "nobody" here."
Ma- "Nara is the only one who matters!"

Discussion

According to the results, it is possible to affirm that the AAA is an activity possibility for institutionalized elderly, what confirms the data of the study that indicates that the company of animals provides pleasurable moments of conviviality, minimizing pain, sadness and fear, even if temporarily²⁴.

The demonstrations of affection expressed by the elderly in relation to Nara confirmed the indications of the study that states that the dog is the most suitable animal for an AAA, as dogs express a natural affection for people, can be eas-

ily trained and create positive responses to body touch²⁵. In this way, the researches emphasize the motivational role of dogs as catalysts of human emotions, with obvious reflections on physical and mental health²⁶; the researches also indicate the increase in communicative initiations, since the dog can act as a catalyst for the subject's motivation by encouraging an environment of unconditional acceptance for the speech, making it more enjoyable and less difficult¹⁵. In addition, the dog can be a soothing agent, since there has been a change in the social environment after the AAA sessions, as well as in the coexistence, in the mood and behavior of the subjects studied, with reduction in

cases of discussions and confrontations. The affection and caress aroused in the elderly by animals and expressed with spontaneity through cuddling, kissing or loving words were characterized as an object of care²⁷.

In general, the results of researches suggest the benefits of AAA with respect to communication, both in reducing/overcoming symptoms expressed in oral and/or graphic language¹², as in the intensification of the dialogic activity, gestures and affection¹³.

In this direction, it should be noted that nurses, assistants, caregivers and the staff of the LSIs were involved with the work in this study, gradually widening their interactions with the elderly and with the speech-language therapist, who was the researcher, and the dog, thus corroborating the data in the literature that indicate the gains obtained through the AAA: verbal interaction between the members of the group, greater adherence to treatment, improvement in the attention skills, encouragement to recreation and leisure activities, increased self-esteem, reduced anxiety and loneliness, improvement in interaction with the health team and significant increase in the motivation for engaging in group activities²⁶.

It's worth pointing out that, although all the elderly participated in the AAA, the most mentioned results refer to M, Ma, Ru, Sa, Ve and Ze, the most active participants in the interaction with Nara. Therefore, there is a better communicative performance in these cases, what confirms the study that indicates this benefit as derived from a greater integration with the dogs²⁷.

It was observed in the sessions held by the speech-language therapist/researcher without the dog that in all the situations where the elderly noticed the absence of the dog, they asked for her to be present and "sent messages" to Nara, always asking about the next session. By the way, some scholars point out that the sessions raise expectation in the elderly, and also a frustration when the dog is not there. In addition, the frequency of the AAA favors the memory ability of the elderly²⁶.

The effectiveness of the AAA has been proven through studies around the world, and in different areas, such as pediatrics, geriatrics and psychiatry, among others. In this way, providing physical and mental health benefits to institutionalized people^{29,30}.

The production of knowledge with respect to the potential for changes in the therapeutic environment has been gaining space in relation to the use of the AAI in speech-language therapy. Since 2007, several studies on the human-animal relationship, with a view to a scientific approach to the topic, are being developed in a Postgraduate Studies Program in Speech-Language Therapy of a university in São Paulo. The pioneering program features master's thesis completed and in progress, in addition to two doctoral thesis. The results of this study corroborate with the studies that state that it was possible to report the presence of the animal as a facilitator of the interactions and as an improvement of the communicative behavior, thus increasing the therapeutic processes^{12,13}.

Conclusion

This study addressed the effects of the AAA in the communicative behaviors in a speech-language therapy approach, and the results showed the benefits regarding the verbal and non-verbal communication of the subjects studied: in group dynamics and in the individual performance in all cases.

According to the results found in the elderly group studied, it is possible to affirm that the presence of the dog has been a facilitator of interactions and promoted the creation/strengthening of interpersonal bonds, permeated by dialog.

In this way, this research expects to encourage and contribute to the pursuit of scientific evidence on the subject, so that the AAI and its health care modes can be investigated and incorporated into the clinical therapeutic method, especially to characterize and analyze age groups, clinical symptoms and different situations.

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